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ABSTRACT

The resource guide provides information on challenging and adventurous physical activities for handicapped persons. References for printed materials, audiovisual materials, and special equipment or assistive devices are listed for aquatics, winter activities, and outdoor activities (bicycling, fishing, hiking and nature trails, horseback riding, hunting and riflery, mountaineering, orienteering, Outward Bound, trip survival, and wilderness camping). Each section is indexed according to activities, handicapping conditions, and teaching methods. Also included are a listing of resource contacts for specific activities and 12 reprints concerning challenging activities. (CL)

CHALLENGING OPPORTUNITIES FOR SPECIAL POPULATIONS

in

AQUATIC, OUTDOOR, AND WINTER ACTIVITIES

Aquatics	Winter Activities	Outdoor Activities
Boating	Ice Fishing	Bicycling
Canoeing	Ice Hockey	Fishing
Hydroplaning	Ice Skating	Hiking and Nature Trails
Rowing	Skiing	Horseback Riding
Sailing	Sledding	Hunting and Riflery
Scuba/Skin Diving	Snow Mobiling	Mountaineering/Rappelling
Surfing	Snow Shoeing	Orienteering
Water Skiing	Snow Sculpture	Outward Bound
White Water Rafting	Tobogganing	Survival Camping
	Winter Camping	Trip Camping
		Wilderness Camping

INFORMATION AND RESEARCH UTILIZATION CENTER
IN PHYSICAL EDUCATION AND RECREATION FOR THE HANDICAPPED

Sponsored by American Alliance for Health, Physical Education, and Recreation
Unit on Programs for the Handicapped
1201 Sixteenth Street, N. W.
Washington, D. C. 20036

A Project of U. S. Department of Health, Education, and Welfare, Office of Education, Bureau of Education for the Handicapped

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Materials for this packet were collected, reviewed, evaluated, collated, and assembled by Nancy Graue, Intern in Physical Education and Recreation for the Handicapped: Information and Research Utilization Center (IRUC).

For many years, individuals with various handicapping conditions have had opportunities to participate in day camp programs; some have received swimming instruction and taken part in recreational aquatic programs, still others have participated in residential camp programs. Only recently have horizons been extended and recognition given to the fact that individuals with various handicapping conditions can and want to be afforded the same opportunities as their friends and pals. Regardless of type or severity of handicapping condition, individuals want to take calculated risks and be neither sheltered nor overly protected. As a result, many new and exciting experiences are becoming available to all, including the most severely involved.

Many providers of services have been so busy in their own programs that they have not had opportunities to tell others about their success stories and about their exciting and productive experiences. As an initial step for providing information about resources of all types dealing with challenging aquatic, winter, and outdoor activities, this project has been undertaken.

Many people have contributed to the success of this venture. To the many individuals who so willingly and unhesitatingly shared information and materials about their excursions with these activities as they opened their files and their hearts, a simple and sincere thank you is given. Special gratitude is reserved for Nancy Graue who went above and beyond the call of duty in planning, developing, and carrying out this project. Many obstacles confronting each of us daily are man made. Generalizations leading to categorication and labeling are imposing man made obstacles that stand in the way of a life worth living by many impaired, disabled, or handicapped individuals. Often the attitudes of others is their only handicap! To the end that every individual is provided more and better opportunities to gain the quality of life sought as the unusual becomes usual, the difficult less so, the impossible becomes possible, and climbing the highest mountain more than a song, this packet is respectfully dedicated.

Julian U. Stein, Director
IRUC and AAHPER Consultant
Programs for the Handicapped

March 1974

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American Alliance for Health, Physical Education, and Recreation

INTRODUCTION

In the past few years, opportunities for individuals with various handicapping conditions to participate in a variety of recreational activities have increased greatly. Activities once considered out of the question for impaired, disabled and handicapped persons now are almost common place and provide realistic and challenging opportunities for these populations. They now demand that such activities be included in recreation programs for them. Regardless of the type and severity of an individual's handicapping condition, many now find success, achievement, and personal satisfaction through a wide variety of challenging and exciting physical, recreational, and sports activities. For example

Visually impaired individuals ski cross-country and downhill, climb mountains, sail boats, and participate in rowing, cycling, skin and scuba diving, white water rafting, and hiking.

Amputees, paraplegics, and quadriplegics ride horses, fish, ski, partake in ice hockey, canoeing, boating, white water rafting, surfing, water skiing, hunting, and riflery.

The most severely, profoundly, and multiply handicapped persons are involved in backpacking, wilderness and survival camping, caving, orienteering, Outward Bound challenge courses, and participate in surfing, water skiing, hydroplanning, fishing, and casting. Furthermore, they ski, snow shoe, toboggan, ice skate, snow mobile, and ice fish in the severest winter weather.

To keep pace with the trend of increasing opportunities for impaired, disabled, and handicapped persons, recreation personnel, physical educators, and others in leadership positions must be in touch with current information and materials. Although much has been accomplished in collecting and providing information about activity areas such as swimming and residential camping for individuals with various handicapping conditions, materials and resources about other challenging opportunities in aquatic, winter, and outdoor activities have not been widespread and distribution is lacking. This packet has been designed to provide information which will hopefully help fill this void and aquaint interested individuals with available resources and materials.

This packet provides comprehensive listings of information dealing with a broad range of activities which are considered challenging, adventurous, and possibly unusual for impaired, disabled, and handicapped persons. Information about on-going programs, resource personnel, various types of adapted equipment or specific assistive devices, and materials such as publications, research reports, audio visual aids, and fugitive or unpublished items is included. Contents can be useful to impaired, disabled, or handicapped individuals themselves or to persons involved with or interested in providing recreational, physical education, or sports activities for special populations.

Information presented in this packet was gathered from various sources. Early in the process of collecting materials, letters were

sent to selected professional personnel and organizations. Request was made for information about challenging opportunities in aquatic, winter, and outdoor activities other than day and residential camping or instructional or recreational swimming involving special populations. Printed materials and information about competent resource personnel, on-going programs, and projects, audio visual aids, and personal experiences were solicited. Responses from several of these contacts contributed greatly to materials selected for and contained in this packet.

A great deal of information found in this packet came from articles in professional journals, newsletters, and newspapers. Although few books dealt entirely with the areas of contern, several had sections with useful and appropriate information. Research reports and unpublished papers were among other resources reviewed. Other sources included bibliographies and information sheets provided by --

- North American Riding for the Handicapped Association, 108 LaRue Drive, Huntington, New York 11743
- Association for the Education of the Visually Handicapped, 1604 Spruce Street, Philadelphia, Pennsylvania 19103
- Educational Resources Information Center, National Institute of Education, U.S. Department of Health, Education and Welfare, Washington, D. C. 20208
- Disabled Living Foundation, 346 Kensington High Street, London, W14 8NS, England

Packet materials are organized into eight activity areas. Each of these sections contains an annotated bibliography of printed materials, audio visual aids, and assistive devices or adapted equipment. Some items not specifically pertaining to special populations have been included since their contents were felt valuable, appropriate and applicable to anyone interested or involved in these areas for special populations. Each major section contains an index which is included to systematize and reduce search time for individuals seeking specific information. A composite chart of resource contacts is included after the eight activity area sections. This inclusion enables readers to identify and locate resource personnel and programs concerned with specific activity and sources from which comprehensive information can be obtained.

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AQUATICS INDEX

This section is indexed according to activities, handicapping conditions and teaching methods. Numbers represent the sequential order of printed materials, audiovisual items, assistive devices/ adapted equipment, and additional information found in this section.

Materials in the following sections designated by * do not pertain specifically to special populations. However, each has implication for and can be used in aquatic activities involving impaired, disabled, and handicapped participants.

AQUATICS

Printed Material

1. Adams, R. C.; Daniel A.; and Rullman, L. "Para-Canoeing." Games, Sports and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 207-211.

   Describes canoeing as an activity for paraplegic and physically impaired individuals includes descriptions of equipment, safety skills and techniques, boarding canoes, and emergency procedures.

2. Anderson, Roger J. Canoeing and Wilderness Camping with Teenage Institutionalized Educable Mentally Retarded Boys. Special project. Mankato, Minnesota: Mankato State College, 1964. Article, "Canoeing and Wilderness Camping." The Best of Challenge. Washington, D. C.: American Association for Health, Physical Education, and Recreation, 1971. pp. 112-113.

   Staff at Mankato State School introduced canoeing and wilderness camping as a part of a program to increase life experience situations. Four EMR boys were chosen for the trip. Presented is information about preparations for the trip which included six training and orientation sessions, and descriptions of the trip itself. Also included are conclusions drawn from general observations, noted accomplishments, and deficiencies of the program and recommendations for future trips.

3. Bond, Gregory. An Adaptive Surfing Apparatus. Master's project. Long Beach, California: California State University, January 1975. Article, "An Adaptive Surfing Device." Journal of Physical Education and Recreation 46:7: 57-58; September 1975.

   Describes effectiveness of an adaptive surfing apparatus designed and constructed for use by individuals with a variety of impairments affecting one or both of the upper extremities. Functional evaluation of the apparatus was carried out in both a swimming pool and in the ocean. Eight subjects--seven males and one female, 12 to 19 years of age--included individuals with cerebral palsy and spasticity, unilateral birth defects, post-polio, amputation, and loss of prehension. Case studies substantiated effectiveness of this apparatus under test conditions. The apparatus was found safe, versatile in terms of adaptability to various conditions, and effective particularly when the participant had previous water experience. Results also indicated that the adaptive surfing apparatus can be used by selected impaired persons for rehabilitation and recreation. Detailed information is presented on modification of apparatus, design, use of device with a prosthesis, criteria for operation, subjects, and testing procedures for both pool and surf checkouts.

4. Boyd, Lynn A. "Scuba Provides Expression." Journal of Rehabilitation 38:4: 21; July-August 1972.

Spinal cord injured, often young adult males with aggressive conflicts, need recreation outlets for their physical and emotional well-being. An experiment in scuba for paraplegics, quadrilplegics, and amputees was successfull. Noted is some of the special equipment which was used both in and out of the water. Some instances in which swimmers needed special assistance, such as in entering the water, were discussed.

5. Camp Confidence. "Boating Activities." Waterfront Program--Summer 1973. Brainerd, Minnesota: the Camp (Box 349, 56401). pp. 5-6.

Among activities described are: pontoon boating, particularly for wheelchair campers; small craft including row boats; glass-bottom boat riding using a special boat with a plexi-glass bottom; and paddleboating. Values of these activities and several safety precautions are mentioned. (Camp Confidence is a year-round program for mentally retarded, physically and multiply impaired individuals.)

6. Camp Confidence. "Canoeing." Waterfront Program--Summer 1973. Brainerd, Minnesota: the Camp (Box 349, 56401). pp. 7-8.

Sequences of instruction and safety precautions are provided. Also includes diagram on how to hold the paddle. (Camp Confidence is a year-round program for mentally retarded, physically and multiply impaired individuals.)

7. Camp Confidence. "Skin Diving." Waterfront Program--Summer 1973. Brainerd, Minnesota: the Camp (Box 349, 56401). p. 9.

Ideas for providing skin diving instruction are given. Proper care of equipment is listed and value of the activity noted. (Camp Confidence is a year-round camp for mentally retarded, physically and multiply impaired individuals.)

8. Cass, Maurice. Recreation for Blind Adults. Springfield: Charles C. Thomas Publisher, 1966.

General benefits of swimming and activities that should be included in a swimming program for the blind are discussed. Material on swimming is quite general; however, some more detailed information on scuba diving and water skiing for the blind is included.

9. *Council for National Cooperation in Aquatics. Swimming and Diving: A Bibliography. New York: Association Press, 1970.

A comprehensive, unannotated bibliography serving as a guide to written materials and films in areas of swimming, diving,

skin and scuba diving, water safety and facilities. It includes listings of books, periodicals, unpublished research, and films.

10. Croucher, Norman. "Rowing." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High St., W14,8NS), 1974. pp. 18-19.

Brief section deals with competitive and non-competitive rowing for handicapped people. Provides a list of people and organizations from England, Wales, and Scotland to contact for information.

11. Croucher, Norman. "Sailing and Canoeing." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High St., W14,8NS), 1974. pp. 14-17.

This section deals with sailing and canoeing. It provides examples of people with various types of disabilities who participate in these activities along with several useful, practical suggestions. Literature references and addresses of people and organizations in England to contact are given.

12. Croucher, Norman. "Sub-Aqua Diving and Snorkelling." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High St., W14,8NS), 1974. pp. 20-22.

Brief section provides information concerning scuba diving and snorkelling for handicapped persons. Emphasizes safety, precautions and medical advice of which disabled participants should be aware. Contacts and references from England and Scotland are given.

13. Croucher, Norman. "Water Skiing and Aquaplaning." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High St., W14,8NS), 1974. pp. 11-13.

Provides a range of examples which indicate that people with many different handicapping conditions are participating in water skiing. Aquaplaning is also mentioned as an activity that is particularly good for more seriously disabled individuals. Information about resources and publications from England and Scotland is given.

14. Darling Point Opportunity School Staff. "A New Sport in a Special School." Slow Learning Child 11:2: 75-79; 1964.

A Project on Sailing was described as an extra-curricular activity for children in a special school in Australia. The Sabot, a primary trainer sailing craft for children, was used. Prefabricated boats were purchased and described as of simple design for carrying a crew of two. Boats were constructed in the manual training classes and were 7 to 10 feet long and weighed approximately 60 pounds. The project was supported by community

resources. They were launched at a regatta and entered in competitive boat races. Although skippers were from a local yacht club, crew members were residents of the school. A local sailing club was formed and 14 club races scheduled. The four pupils won a total of 20 trophies during the first season. Certain restrictions were necessary for managing this activity. Requirements included parental consent, limitation of the sailing area, beginner swimming certificate, life jackets, practice trials, and experienced supervisors. The children also received training in seamanship.

15. Department of Interior, Bureau of Outdoor Recreation. "Fishing and Boating." Outdoor Recreation Planning for the Handicapped. Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1967. p. 13.

Modifications of facilities and equipment for fishing and boating are described. Emphasizes usefulness of pontoon boats for persons in wheelchairs.

* 16. Gabrielsen, M.A.; Spears, B.; and Gabrielsen, R.W. Aquatics Handbook. Second edition. Englewood Cliffs, New Jersey: Prentice-Hall, 1968.

This handbook may serve as both a text and reference for anyone engaged in aquatic programs. It incorporates major aquatic areas such as skin and scuba diving, surfboard riding, canoeing, boating, water skiing; sailing, bait and fly casting. Provided is information on origin and value of the activities, basic techniques in executing activities, suggestions for teaching and class organization, and safety factors related to conduct of the activities. Lists of references and films are also included.

17. Grosse, Susan J. Broadening Educational Experiences Through Outdoor Education. Milwaukee, Wisconsin: the F. J. Gaenslen School (1301 East Auer Avenue, 53212), n.d. 4 pp.

Describes a three-day camp experience provided by five teachers for 45 physically handicapped students from the F. J. Gaenslen School in Milwaukee. Activities included in the program and discussed were arts and crafts, ecology, mapping, nature, boating, and fishing.

18. Grosse, Susan J. "Small Craft Safety: A Valuable Addition to Your Swimming Program." The Best of Challenge Volume II. Washington, D. C.: American Association for Health, Physical Education, and Recreation, 1974. pp. 64-65.

Describes a unit on small craft safety which was included in the swimming for physically and multiply handicapped children at the F. J. Gaenslen School in Milwaukee, Wisconsin.

19. Guidry, Matthew. "The Challenge-Expanding Horizons of Aquatic Programs for the Handicapped." Presentation at Project Aquatics Workshop, Seattle, Washington and Columbia, Missouri, November 1975. Copies available in xerox form from IRUC (1201 16th Street, N.W., Washington, D. C., 20036). 2 pp. .20 cents.

The author remarks on the need to expand existing aquatic programs for the handicapped to include such activities as skin and scuba diving, water skiing, sailing, boating, surfing, and water polo. Outlined are suggested ways of accomplishing this challenge.

20. Hayes, Harold. "Sailing Blind." The New Beacon. London, England: Royal National Institute for the Blind (224 Great Portland Street), December 1970.

Describes a blind man's experience sailing on the coastal waters of England.

21. Hobbs, Tom R., and Shelton, George C. "Therapeutic Camping for Emotionally Disturbed Adolescents." Hospital and Community Psychiatry 23:10: 298-301; 1973.

Describes benefits of a five-day camping canoe trip undertaken by two counselors and nine emotionally disturbed adolescent boys.

22. Howes, Gordon. "Canoe Course for the Blind." Recreation 55: 131-133+; March 1962.

23. Jerstad, Lute, and Stelzer, John. "Adventure Experiences as Treatment for Residential Mental Patients." Therapeutic Recreation Journal 7:3: 8-11; 1973.

Describes the adventure model in treatment program at Oregon State Mental Hospital which involves cooperative participation of mental patients, professional staff, and guides in three basic adventure activities: rock climbing, white-water rafting, and survival/ecology hiking.

24. Karman, Pat. "Waterskiing!" Sports 'n Spokes 1:2: 17; July-August 1975.

Group of handicapped persons from Seattle (Washington) area highlight their camping-canoeing outing with waterskiing using an apparatus called Aqua-Bat allowing paraplegics and quadriplegics in the group to experience the activity for the first time.

25. Lincoln School Camping Program. Town and Country, Missouri: Special School District of St. Louis County (12110 Clayton Road, 63137), n.d. 6 pp.

Details of a three-day school camping experience for students at Lincoln School (St. Louis County, Special School District) are outlined in this brief paper. Procedures and regulations for conducting horseback riding, archery, boating, game room activities, fishing, air riflery, and trips to the farm are presented. In addition, a three-day time schedule is listed. The paper elaborates on such necessary details as obtaining parental permission, equipment and food needed, teacher-made materials required, awards, cabin cleaning, and criteria for individual skills awards.

26. Lloyds, A.D. "The Blind in an Age of Science: Sports and Hobbies for the Blind." New Beacon 53:631: 287-290; November 1969.

A description of sport and hobby possibilities for visually handicapped persons includes rowing, football, road walking, swimming, Braille car rally, horseback riding, and golf. Other activities which can be adapted for use by blind individuals include darts, bowling, shooting, fishing, and gymnastics. Several other crafts and activity possibilities are mentioned.

27. Lynch, Wallace J. "Canoeing for Recreation and Rehabilitation." Parks and Recreation 7:7: 20-21, 46; 1972.

Procedures for adapting canoeing as a recreational and therapeutic activity for paraplegics are briefly described. Necessary changes in equipment, procedures, and safety precautions can be achieved with minimum of effort. Such adaptations are detailed and illustrated by photographs.

28. Mielzarek, Lee Anna, and Mielzarek, Rolf H. "Reaching Out + Reasonable Risk = Growth Adventure." Challenge 11:1: 1, 3; November 1975.

Camp Shenandoah (Winchester, Virginia) added canoe-camp program to its list of activities. Describes successful results of a four-day canoeing and camping trip with 13 mildly and severely retarded teenagers. Preparations for the trip involving instruction in canoeing skills, safety, and survival, and familiarization with camping equipment are also described.

29. Miller, Oral O. Four Years at the Oars. Washington, D. C.: the Author (3701 Connecticut Avenue, N.W.), n.d. Copies available in xerox form from IRUC (1201 16th Street, N. W., Washington, D. C., 20036). 14 pages. $1.40.

The author recalls his personal experiences as the only blind oarsman for Princeton University Boat Racing Club. Various adaptions and techniques that he found to be helpful or necessary while participating in the sport are discussed.

30. Muhl, William T. "Handicapped Children Reach New Dimensions in Aquatic and Small Craft Achievement." New Dimensions in Aquatics. Pelham, New York: Council for National Cooperation in Aquatics, 1966. (Available through American Alliance for Health, Physical Education, and Recreation.)

Originally given as a speech at the 16th CNCA Conference, the article contains a brief historical overview of the development of swimming programs for handicapped individuals combined with discussion of the values of such programs. The author ends with a challenge to all persons in aquatics to carry on the growth of these programs to include disabled persons in all phases of aquatic activity.

31. Okuno, Ken. "White Water!" The Independent 2:4: 8-9; Summer 1975.

Two handicapped men, one blind and the other partially paralized due to polio, take on the challenging and exciting sport of white water rafting. Originally introduced to the activity and trained by the American River Touring Association, they are now able to complete trips on their own. The article also describes an organization that conducts rafting tours for groups of handicapped people.

32. "Program for Handicapped." Outdoor Recreation Action 38:7; Winter 1975.

Brief section describes Ultimate Ski Tours Inc., a program which offers skiing to persons having any type of disability. The program is also a part of year-round sports oriented tours including camping, horseback riding, canoeing, scuba diving, and sailing for handicapped individuals.

*33. Pyle, Beatrice A. Small Craft: An Instructional Textbook for Teachers. Dubuque, Iowa: Kendall/Hunt Publishing Co., 1974.

This is a text on small craft with an emphasis on power boating for physical education instructors in public schools, colleges and universities or community recreation leaders, and could also serve as a handbook for amateur boatmen. Two ten-week lesson plan outlines are provided and sections on canoeing and sailing included.

34. Ramsay, Richard L. "Water Skiing--A New Sport for the Blind." Rehabilitation in Canada: 18; 1968.

Articles taken from the First Canadian Symposium on Recreation held in Montreal in June 1967.

35. Roberts, K. "Sports for the Disabled." Physiotherapist (Br.) 60:9: 271-274; September 1974. Address inquiries to K. Roberts, 1 Model Farm Close, Loughborough, Leics., England.

The significance of physical recreation in the rehabilitation process is so undervalued that it appears to be almost totally ignored. Mr. Roberts, a T9 paraplegic and a recently qualified Royal Yachting Association sailing instructor, brings the authority of personal experience to this charge. He states that the most frequent cause of disillusionment in rehabilitation is fatigue and declares exercise to be invaluable in restoring the disabled person's strength, coordination, speed, and endurance. When presented in the form of a game or organized sport, it is more readily accepted by many who would not undertake a regular exercise program. He feels that introduction to sports activities will provide the solution to the problem of fatigue because it can effectively prevent disabled people from resigning themselves to their disabilities, and thus accelerate the process of social reintegration. The author discusses basic approaches to recreation in rehabilitation, the selection of sports, and the problem of continuing the activities after leaving the rehabilitation center.

36. Ryan, William F. "Observations of a Community Recreation Director on Recreation for the Retarded." Recreation in Treatment Centers 3: 16-17; September 1964.

Quincy Massachusetts Summer Recreation Program for mentally retarded children is described in terms of its development, financing, staffing, and programing. Most of the retarded participants were able to take part in all activities including crafts, archery, nature, trampoline, boating, sailing, and swimming.

37. Turner, R., and Biblary, A. "Blind People can do More than Tread Water." Braille Moniter. Berkeley, California: National Federation of the Blind (2652 Shasta Road, 94708), November 1971.

Techniques on scuba diving are discussed.

38. "Will-a-Way Recreation Area." Journal of Health, Physical Education, and Recreation 43:1: 89; 1972.

This is an outdoor recreation area specifically designed to allow complete movement and participation of impaired, disabled, and handicapped persons. Provisions are made for games, fishing, playground activities, picknicking, hiking, family and group camping, boating, and swimming.

Audio Visual Material

39. Cast No Shadow (16mm, sound, color, 27 minutes). Professional Arts, Inc., Box 8484, Universal City, California.

This unique and dramatic film vividly depicts a wide range of recreation activities for severely and profoundly mentally

retarded, physically handicapped, multihandicapped, and emotionally disturbed children, teens, and adults at the Recreation Center for the Handicapped (San Francisco, California). Emphasis is on values of recreation and its effects upon lives of handicapped persons as an integral part of their total learning experiences and social development. Equally, it is about handicapped individuals, ages 2 to 85, as people. Enthusiasm, satisfaction, and enjoyment are shown on their faces as they participate in a variety of activities from snow skiing at Squaw Valley's Olympic Village to wheelchair surfing in the Pacific Ocean. Recreation Center for the Handicapped (see Resource Contact List, pg. 77) depicts this same program.

40. Challenge: A Camp for All Seasons (16mm, sound, color, 12 minutes). Easter Seal Society of Florida, 231 East Colonial Drive, Orlando, Florida, 32801.

Camp Challenge is a recreation and rehabilitation facility in central Florida supported by the Easter Seal Society of Florida; its program is designed to challenge both children and adults with a variety of impairments and disabilities. A general camp program routine is followed for two-week sessions which provide opportunities for each camper to participate in many activities--arts and crafts, nature, aquatics, small craft, fishing, dancing, archery, bowling, and other recreational sports. The therapeutic design of the swimming pool affords multiple use; wooded and play areas complement nature and outdoor activities; an artificial lake creates opportunities for experiences in small craft and fishing; buildings are functional as well as aesthetic. Another feature of the camp is a Center for Learning and Training in which parents are actively involved with specialists in speech, hearing, and vision. A special camp session is held for stroke victims. Training implications for medical, paramedical, professional, and volunteer personnel are evident and mentioned; however, there is no elaboration on such program opportunities. The film presents camp facilities, shows campers in activities, and depicts a general overview of camp management and support, that will be useful for promotional purposes and general audiences.

41. Not Just A Spectator (16mm, sound, color, 36 minutes). Town and Country Productions, 21 Cheyne Row, Chelsea, London, SW3 5HP. Available in United States from Instructional Rehabilitation Film Library, 20 West 40th Street, New York, New York, 10018.

Within their own capabilities some disabled people have distinguished themselves in national and international sports competition. However, because of lack of provisions of leadership, accessible facilities, and inadequate transportation, the majority of disabled people have been denied the chance to take part in physical recreation activities. This film, produced in cooperation with the Disabled Living Foundation, in London, shows something of the many (between 40 and 50) and sometimes

unlikely activities that challenge, give personal satisfaction, and provide pleasure to a great number of people with different conditions. Whether climbing, basketball, angling, sailing, kyaking, caving/spelunking, wheelchair dancing, skeetshooting, horseback riding, or less strenuous bird-watching or checkers, transportation, facilities, adapted devices, and leadership are available. Able-bodied and disabled are shown participating together; sensible adaptations of usual activities are discussed; similar leisure interests of able-bodied and disabled are emphasized. Social and physical benefits of active participation by showing what can be achieved punctuate the basic message of the film--sports and recreation help make the life of a disabled person worth living.

42. Progress Through Determination (super 8, color, 25 minutes). Susan J. Grosse, F. J. Gaenslen School, 1301 East Auer Avenue, Milwaukee, Wisconsin 53212. A cassette accompanies the film to provide the sound track for the film. The film and cassette are available for rental at a cost of $15.00.

F. J. Gaenslen School for orthopedically handicapped children. Included are descriptions of swimming instruction, recreational swimming, small craft safety, elementary rescue techniques, and use of the mask and snorkel. Participants in the film have a variety of handicaps, including cerebral palsy, spina bifida, arthrogryposis, perthes disease, and muscular dystrophy. In addition, many of the students are multiply handicapped by having hearing or vision problems, learning deficiencies, or by being mentally retarded.

43. Scuba Diving. (slide/cassette).
Max Morton, Colorado State University, Ft. Collins, Colorado.

Scuba diving experiences of two paraplegic young men are presented. Included is detailed information about how each became interested, trained, dived in the Pacific Ocean, and overcame various problems. Importance of these experiences and what they have meant to each of the participants are described in their own words.

Assistive Devices and Adapted Equipment

44. Adaptive Surfing Apparatus. Irvine, California: Gregory Bond (3862 Uris Court, 92705).

For description, see abstract of the article: Bond, Gregory. An Adapted Surfing Apparatus.

45. Aqua-Bat. Wilmot, Wisconsin: Gander Mountain, Inc., Outdoor Sportsman's Suppliers (P.O. Box 248, 53192). $104.50.

The Aqua-Bat consists of two regular waterskiis approximately two feet apart, connected by heavy tubing to which a slat is attached. Special hinges afix the tubing to the skiis and the seat, so that a seated waterskier can steer by leaning one way or the other. A tow rope may be hand-held or tied to the front piece of tubing. Stirrups on the front of each ski secure the waterskier's feet. This device has permitted paraplegics and incomplete quadriplegics to waterski successfully. It can be used by persons with a variety of handicapping conditions, such as amputees, orthopedically handicapped, and cerebral palsied persons. The Aqua-Bat measures 31" x 69" x 15" high, weighs 29 pounds, and floats. A full throttle start is not required to begin waterskiing, but, depending on the extent of the participant's impairment, a shallow water start may be preferable so that assistants can steady the device for the participant. Price includes the Aqua-Bat, 72-foot tow rope with 12-inch bar, float, hitch ring, and brindle.

46. Gunwhale Adaptive Equipment.

This consists of a foam rubber pad (3 inches thick, 36 inches long, and 6 inches wide) which is secured over the gunwhale or upper edge or rail of the boat's side. It is used to protect physically handicapped individuals against bruises while getting into and out of a canoe. For additional information, see: Games, Sports, and Exercises for the Physically Handicapped. Second edition. p. 208.

Additional Information

47. The Canadian Institute for the Blind

The Institute has produced a two-page paper on waterskiing for the blind. See Resource Contact Chart for address.

48. Brief section in Games, Sports, and Exercises for the Physically Handicapped. Second edition.

The first known canoeing program for paraplegics was organized at the Woodrow Wilson Rehabilitation Center in Fisherville, Virginia.

WINTER ACTIVITIES

This section is indexed according to activities, handicapping conditions and teaching methods. Numbers represent the sequential order of printed materials, audio visual items, assistive devices/adapted equipment, and additional information found in this section.

Materials in the following section designated by * do not pertain specifically to special populations. However, each has implications for and can be used in winter activities involving impaired, disabled, and handicapped participants.

WINTER ACTIVITIES

Printed Material

1. Adams, R. C.; Daniel, A.; and Rullman, L. "Ice Skating." Games, Sports, and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 200-207.

   Describes ice skating as an activity for physically impaired persons. Includes descriptions of equipment, apparel, safety techniques, assistive devices, and program adjustments for specific disabilities.

2. Adams, R. C.; Daniel, A.; and Rullman, L. "Three-Track Skiing." Games, Sports, and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 240-244.

   Describes three-track skiing as an activity for physically handicapped individuals. Includes descriptions of equipment, safety, techniques, adapted equipment, assistive devices, and program adjustments for specific types of amputations.

3. *Baldwin, Edward R. The Cross-Country Skiing Handbook. Toronto, Ontario, Canada: Pargurian Press Limited, 1972.

4. *Bennett, Margaret. Cross-Country Skiing for the Fun of It. New York: Dodd, Mead & Company, 1973.

5. Bennett, Mary Alice. "Retarded Add Ice Skating to Skills." Des Moines Tribune. Wednesday, January 14, 1976.

   Describes ice skating program for young retarded adults led by Jan Claussen, recreation therapist from Des Moines (Iowa) Recreation Center.

6. Blatchford, Nicholas. "Skiing a 'Fantastic' Thing for the Blind." The Washington Star, n.d.

   Discusses contributions of Erling Stordahl, originator of the Race for Light cross-country meet for blind skiers, held in Colorado, February 23, 1975. Stordahl, himself a blind skier, directs the Beitostolen Recreation and Rehabilitation Center in Norway which provides activities such as skiing, swimming, rowing, horseback riding, skating in wheelchairs, and gymnastics for disabled children and adults having various types of handicapping conditions.

7. "Blind Skiers Tour Minnesota Slopes." Paraplegic News 29:329: 19; February 1976.

   Visually handicapped skiers from five countries participated in the Ski for Light event at Honeywell Country Club (Minneapolis,

Minnesota) on February 1, 1976. The ski touring for the blind is an idea developed in Norway fifteen years ago by Erling Stordahl, a blind skier himself.

8. Bott, Kristine, and Bannasch, Donald. "Winter Activities." Discovery: Guidelines for Establishing an Outdoor Education Program in Special Education. Mount Clemens, Michigan: Macomb Intermediate School District (44001 Garfield Road, 48043), 1975. pp. 356-382. Chapter 38.

   Provides descriptions of many helpful activities for planning an effective winter outdoor education laboratory experience. Among activities described are winter along the trails, winter outdoor group activities, ice cube games, snow painting, snow cave investigation, and make a snow gauge.

9. Brachey, Nancy. "Ice Skating Proves Great Therapy for Slower Pupils." Charlotte News (Virginia), April 4, 1974.

   Describes how a special education class of educable mentally retarded children and slow learners benefited from an eight-week ice skating program. Emphasized was improvement of the class members in social abilities as well as in physical strength and coordination.

10. Burks, Alvin. "Amputees Ski at Concord." The Amp, March 1973.

11. Camp Confidence. 'Doing is Fun': Winter Activities. Brainerd, Minnesota: the Camp (Box 349, 56401), n.d. 3 pages.

    Studying growth of underground plants and trees in the winter is discussed.

12. Camp Confidence. Making Snowshoes. Brainerd, Minnesota: the Camp (Box 349, 56401), n.d. 5 pages.

    Instructions and illustrations for making snowshoes out of tree branches and lacings are provided.

13. Camp Confidence. Snow and Ice Activities. Brainerd, Minnesota: the Camp (Box 349, 56401), n.d. 11 pages.

    Provides a collection of games and activities for wintertime including ice cube games, making a snow gauge, snow cave investigation, studying ice thickness, snow temperature, studying cross sections of snow banks, examining falling snow crystals, making frost drawings, and preserving frost patterns.

14. Camp Confidence. What to Do in the Winter. Brainerd, Minnesota: the Camp (Box 349, 56401), n.d. 2 pages.

    Ideas for winter activities are listed.

15. The Children's Hospital. The Children's Hospital Three Track Ski Club. Denver, Colorado: the Hospital (1056 East 19th Avenue, 80218), n.d. 5 pages.

Information about the Children's Hospital Three Track Ski Club and some very useful suggestions on organizing such a program are given. Describes organization of these ski programs, choosing a ski area, coordinating staff, forming a club, transportation, equipment, and financial support.

16. Cobb, Michael. "Skiing is for Everyone." Therapeutic Recreation Journal 9:1: 18-20; First Quarter 1975.

Describes a ski instructor program for amputees recently developed at Greek Peak International Ski School (Virgil, New York). Training of instructors, problems encountered by students, safety precautions, and student progress are discussed.

17. Croucher, Norman. "Ski-Bobbing, Tobogganing, Sledging, Ski-Joring." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High Street, W14,8NS), 1974. pp. 31-32.

Ski-bobbing, tobogganing, sledging, and ski-joring are all described. Possibilities of these activities for handicapped individuals for recreational purposes are discussed. Resource contacts concerned with these areas from Great Britain are included.

18. Croucher, Norman. "Skiing." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High Street, W14,8NS), 1974. pp. 26-30.

Provides brief notes describing various organizations, people, and events from several different countries concerned with skiing for handicapped individuals. Special equipment and techniques often used by disabled skiers are included. Addresses for information sources from the United States, Switzerland, England, Scotland, and Wales are provided.

19. Disabled Skier's Association of British Columbia. Cerebal Palsy Techniques. Vancouver, British Columbia, Canada: the Association (Box 3433, Main P.O.), n.d.

20. Disabled Skier's Association of British Columbia. Pre-Ski Classes. Vancouver, British Columbia, Canada: the Association (Box 3433, Main P.O.), n.d.

21. "Downhill in Darkness--Skiing Blind." Outdoor Recreation Action 38:6; Winter 1975.

Describes the American Blind Skiing Foundation, founded by Sam Skobel of Mount Prospect, Illinois.

22. Dypedal, Tellef. Efforts of the Norwegian Armed Forces During the Ski Week for Blind People ("Redder-Uken") at Beitostolen. Beitostolen, Norway: Beitostolen Helsesportsenter (2953 Beitostolen), n.d. 3 pages.

The Norwegian Armed Forces have been instrumental in providing an annual ski week for the blind, an idea originally conceived of by blind skier Erling Stordahl. Students of the Norwegian College for Physical Training and Sport also participated in this project which has become a required part of their education. Combined efforts and support of these groups have made this program a great success.

23. Endres, Richard. A Year-Round Camping and Outdoor Education Center for the Mentally Retarded in the Northern Locality of the United States. Special project paper. Brainerd, Minnesota: Brainerd State Hospital, 1968. 43 pages.

Comprehensive report on developing a year-round camping program in Minnesota covers philosophy, program implications, and outcome. Provided rationale for development of Camp Confidence year-round facility for special populations in Brainerd, Minnesota.

24. Endres, Richard. "Northern Minnesota Therapeutic Camp." Journal of Health, Physical Education, and Recreation 42:5: 75-76; 1971.

Discusses a year-round camping and outdoor education facility primarily for mentally retarded residents of Brainerd State Hospital. Recreation personnel, teaching team members, psychiatric technicians, and social workers serve as counselors at the camp.

25. Endres, Richard. "Winter Camping with Mentally Retarded at Camp Confidence." Journal of Health, Physical Education, and Recreation 43:1: 86-89; 1972.

Summer or winter, dual purposes of Camp Confidence are to assist each individual to interact socially within his/her own small group, and to help each individual gain confidence in him/herself. Activities presented include outdoor cooking, tobogganing, ice fishing, ice skating, snowshoeing, animal tracking, snowman building, and skiing.

26. Farlekas, Chris, and Wild, Glen. "Handicapped Vets Ski to Build Confidence." The Amp, February 1972.

Describes ski day held for 20 Vietnam War amputees from Valley Forge General Hospital (Phoenixville, Pennsylvania) and Walter Reed Hospital (Washington, D. C.). M.Sgt. Leon Dubay, Army instructor for paraplegics and a champsionship skier, works with men from both hospitals teaching skiing for therapeutic purposes.

27. Fett, Ron. "Rockville Dynamo Stages Benefit for Deaf Skiers." The Washington Post, March 13, 1973.

28. Gorton, John. "Playing it Cool." Challenge 5:2: 4-5; November 1969.

An unplanned, 12-week ice skating program proved to be an exciting new challenge for mentally retarded students of Dr. Joseph H. Ladd School (Exeter, Rhode Island). Improvements in each participant's strength, coordination, poise, and self-confidence were noted.

29. "Ice and Snow Help These Kids Go." The Drone Sheet (University of Virginia), March 3, 1975. 2 pages.

Briefly describes effective results of an ice skating program at the Children's Rehabilitation Center in Charlottesville, Virginia. Recreational Therapists at the Center emphasize the therapeutic value of the activity for handicapped children and add that success with such a program is greatly aided by support and cooperation of the business community, staff, and administration of the Center.

30. *Ice Skating Institute of America. Recreational Ice Skater Test Guide. Fort Myers, Florida: the Institute (P. O. Drawer 2506, 33902), 1968.

Provides a complete testing program for recreational ice skating for skaters at various ability levels.

31. "Ice Skating Urged as Therapy." Intercom (Pennsylvania State Faculty Newsletter), December 13, 1973. 1 page.

Describes work of Kurt Oppelt in developing ice skating programs for handicapped individuals, his efforts to establish training programs to qualify more people to teach ice skating to impaired persons, and his contribution in sponsoring a special olympic ice skating program for retarded individuals. Included are Oppelt's ideas of the values of ice skating which emphasize physical, social, and psychological benefits of such a program.

32. *Jonland, Einar, et.al. An Introduction to Ice Skating. Fort Myers, Florida: Ice Skating Institute of America, Inc. (P. O. Drawer 2506, 33902), 1973. 68 pages.

This introduction to recreational ice skating is presented by the Ice Skating Institute of America. Publication explains and illustrates basic skills of skating.

33. The Joseph P. Kennedy, Jr. Foundation. Special Olympics--Ice Skating Handbook. Washington, D. C.: the Foundation (1701 K Street, N.W., 20006), 1975.

Provides a basic outline on how to conduct an ice skating program for retarded children. Suggestions and tips are given on contacting rink managers, setting up class, instruction, training, and competition. Also includes How to Improve Your Ice Skating and Recreational Skater Test Guide provided by the Ice Skating Institute of America.

34. Lewis, Julie. "Skiing for Disabled." Leisurability 2:4: 27-31; October 1975.

Briefly describes formation of the Disabled Skiers Association of British Columbia (DSABC). DSABC programs are outlined and the values of skiing to the disabled person enumerated.

35. Lozorka, Lisa. "Excelling in NHL with Diabetics." Physician and Sports Medicine 2:2: 52-53; February 1974.

Training and personal regimen of Bob Clark, outstanding Philadelphia Flier defenseman with diabetes is described.

36. Maroney, Mary. Maroney Skating Ladder. Summit, New Jersey: the Author (57 Fernwood Road, 07901), 1966. Price $1.00.

Provides a sequential and progressive program for teaching ice skating. Describes exercises, novel races, and points for achievement which consist of maneuvers on ice geared toward competition and racing.

37. Matthew, Eileen Holm. "Amputees on Skis." Todays Health, January 1967. p. 12.

Describes the origination of the Portland (Oregon) Jaycee Amputee Ski School directed by Lee Perry. Includes comments of several amputee skiers about their experiences.

38. Messner, Duane G., and Williams, Willie. "The Three Track Ski Club and the National Amputee Ski Campionships." Inter-Clinic Information Bulletin 13:1: 1-4; October 1973.

Describes development and organization of the community supported Three Track Ski Club at the Children's Hospital in Denver (Colorado). Provides a case report for one teenage participant and traces his participation in national competition. Discusses formation of the National Inconvenienced Sportsman's Association and a film that is available on teaching methods used at Winter Park.

39. Micay, Nathan. "Notes on Jogging." New Outlook for the Blind 67:7: 327-328; September 1973.

Describes methods to let visually impaired individuals jog and skate with sighted partners.

40. Milgate, Gary. "Ice Skating Magic." Challenge PA, November 1974. pp. 22-24.

Describes the background of Kurt Oppelt, physical educator at Pennsylvania State University who teaches mentally retarded and handicapped people to ice skate, and has also devoted a great deal of time promoting teacher training programs in therapeutic ice skating. Oppelt's own ideas of methods of teaching beginning handicapped and retarded children to ice skate are provided along with his views of the values of ice skating for disabled persons.

41. Miller, Oral O. "Race for Light." Performance 25:11: 10-13; May 1975.

Describes an annual cross-country ski race--Race for Light--for the visually impaired held in Colorado in 1975. Participants had a one week training program cullminating in the race against the clock. Sighted guides and deep tracks in the snow assist blind skiers.

42. National Inconvenienced Sportsman's Association. National Amputee Ski Technique. Carmichael, California: the Association (3738 Walnut Avenue, 95608), n.d.

This book is a product of 17 years experience with amputee skiing. It is designed as a guide for amputees and their instructors. This skiing system, based on the American method, is adaptable to any of the diverse approaches of teaching skiing. The book is relatively universal since it evolved from biped technique.

43. National Inconvenienced Sportsman's Association. Teaching the Blind to Ski. Carmichael, California: the Association (3738 Walnut Avenue, 95608), n.d.

Provides essential information for instructors and/or those who wish to encourage the blind to ski. Outlines psychological implications for ski instruction of the blind that are basically the same for sighted persons. Emphasizes allowing blind students to put on their own skis and provides methods to teach this skill. Discusses establishing communication patterns and rapport for use in instruction and guiding, techniques for getting started, and how to move around with a blind student in both open and closed areas. Describes two methods of skiers moving together that are preferred by partially sighted persons. Tips are given for use of the Poma and chair lifts and for teaching turns. A method of training ski instructors of the blind is suggested.

44. Nayme, Yves. "Courage...Will...Fun!" The Rotarian, March 1973, pp. 26-27.

Yves Nayme, once afflicted with polio, originally proposed the idea for the First International Winter Games for the Handicapped. Described are some events and occurences involving participants with various handicapping conditions who participated in the games.

45. O'Donnell, James. "Snow Trek." Parks and Recreation 8:4: 50-51; 1973.

Describes problems and accomplishments encountered with 12 emotionally disturbed teenagers on a one-week hike in sub-zero temperatures in the Idaho Mountains.

46. O'Leary, Hal. The Winter Park Amputee Ski Teaching System. Second edition. Hideaway Park, Colorado: the Author (P. O. Box 76), 1974.

The three track method of teaching amputees to ski is presented in this well illustrated and easy to understand manual. Problems unique to amputee skiers--care of hands, conditioning, care of stump, fatigue, excessive standing, wind, and balance--are discussed in terms of their implications to the amputee skier and practical solutions in attempting to solve them. Specific performance goals and step-by-step progressions are presented for the amputee skier for walking, falling, getting up, hop turns, sidestepping, straight running, stopping, riding chair, T-bar and Poma lifts, traverse, Uphill Christy, Christy turn, Christy with pre-turn, and shortswing. Both pictures and drawings of the outrigger ski are included.

47. Oppelt, Kurt. "Developing an Ice Skating Program." Pennsylvania Journal of Health, Physical Education, and Recreation, December 1972. 2 pages.

Provides suggestions and procedures for developing an effective ice skating program. Includes ideas for choosing staff, programing and scheduling, clothing expenses, and hints on building or improving a program.

48. Oppelt, Kurt. Instructional Basics: Oppelt Standard Method of Therapeutic and Recreational Ice Skating. State College, Pennsylvania: the Author (P. O. Box 13, 16801), 1974. 38 pages.

This introduction to a tested method of ice skating for impaired persons or for recreational beginners was written for students and teachers with little or no ice skating experience. Physiological, psychological, and social benefits of ice skating for physically, mentally, and emotionally involved persons and for the aged are listed, in addition to safety precautions and teaching considerations. Photographs and text illustrate and describe the Oppelt method step by step.

49. Oppelt, Kurt. "One Small Stroke for the Handicapped." Skating U.S.A., May 1973.

Values of ice skating for children and adults with handicapping conditions are discussed. Handicapping conditions specifically mentioned include mental retardation, postural difficulties, cerebral palsy, post-surgery knee operation, and adult cardiac conditions. Oppelt's own methods of teaching ice skating to beginning handicapped students and ideas for program organization are also presented.

50. Oppelt, Kurt. "The Role of Ice Skating in Adapted Physical Education." Pennsylvania Journal of Health, Physical Education, and Recreation, March 1972.

Enumerated are physiological, psychological, and social values of ice skating for disabled persons. Blind, physically handicapped, mentally retarded, post coronary patients, aged individuals, or anyone with problems with the knee, ankle, hip joint, or Achilles tendons are among those mentioned who can benefit from this activity. Teaching suggestions are also listed.

51. *Peterson, Gunnar, A., and Edgren, Harry D. The Book of Outdoor Winter Activities. New York: Association Press, 1962.

Provides a collection of ideas, suggestions and directions for sports, games, and informal activities suitable to every kind of winter climate.

52. "Program for Handicapped." Outdoor Recreation Action 38:7; Winter 1975.

Briefly describes and provides the address of Ultimate Ski Tours, Inc., a program which offers skiing to persons having any type of disability.

53. Redford, John B. "Prosthesis for Hockey Playing Upper Limb Amputees." Inter-Clinic Information Bulletin 4:6: 11-15; June 1975.

The popularity of hockey in Canada has resulted in a number of unilateral, upper-limb amputees utilizing conventional prostheses incorporating a voluntary opening hook. Bilateral upper arm amputees on the other hand have an extremely difficult time controlling a hockey stick. A unique prostheses is described that enabled a 13-year old bilateral upper arm amputee to become a skilled forward on his hockey team.

54. "Refereeing by Remote Control." The Physician and Sports Medicine 3:11: 105; November 1975.

Poor communication is one of the greatest handicaps to a deaf person participating in sports. An electronic remote control

stimulator invented by David W. Sparks and tested at Stan Mikita's Hockey School for Hearing Impaired youngsters provides help. A transmitter controlled from the sidelines emits a radio-like impulse that is decoded into a pulse by a receiver worn by the player around his waist. The pulse is transmitted to the wearer's skin where it causes a painless muscle tremor. This could help coaches send information to deaf players and may also be made sensitive to a referee's whistle.

55. Scharman, Russ, and Woolstenhulme, Ron. "Freezurtoz: A Winter Camping Experience." Challenge 9:2: 1,12; November-December 1973.

Describes a six-week winter recreation program at Camp Freezurtoz for 80 moderately and severely retarded residents of Idaho State School and Hospital. Details such as finding a cabin, obtaining warm clothes, planning for menus and equipment such as toboggans and a snowmobile, and selecting participants are discussed. Groups of eight females or males spent two days and nights at the camp, performed housekeeping tasks, enjoyed snow activities such as snowman building, and engaged in evening recreation such as indoor games and crafts and outdoor tire-tubing down slopes.

56. "Second Annual Stan Mikita Hockey School." U. S. Deaf Skier Newsletter 4:4: 11; October 1975.

Reports on the establishment of the American Hearing Impaired Hockey Association founded by professional hockey player Stan Mikita and his associates in March 1974. The AHIHA has two ongoing projects, its own Mikita Hockey School plus management of the U. S. Deaf Olympic Hockey team. The goal of the Stan Mikita Hockey School has been to expand opportunities for American hearing impaired youngsters to compete with normal hearing ice hockey players at all levels. This ambition has been realized by several of the participants who have come from all parts of the country to receive instruction at the Mikita Hockey School.

57. Shriver, Eunice Kennedy. "One Person Makes a Difference." Parks and Recreation 10:12: 39; December 1975.

A section of this article describes Western Carolina Center, a state institution for mentally retarded individuals in North Carolina. Among activities included in that program are horseback riding, camping, skiing, and outdoor recreation programs of all kinds including nature walks.

58. Siegel, Erwin. "Selected Athletics in a Posture Training Program for the Blind." New Outlook for the Blind, October 1966.

Programs in ice skating, skiing, and fencing are suggested as posture improving activities for blind individuals.

59. Sinclair, N. "Cross-Country Skiing for the Mentally Handicapped." Challenge 10:1: 1,8; January 1975.

Riverview School (Manitowoc, Wisconsin) initiated a cross-country skiing program for its intermediate and junior high school aged, mildly retarded students. Described are means of obtaining and adapting equipment with relatively little expense, and an example of the three-week unit plan designed for this program.

60. "Skiing Amputees." The Amp, May 1972.

Describes experiences of Vietnam war amputee Captain Charles O'Brien with the amputee ski program at Valley Forge General Hospital (Phoenixville, Pennsylvania).

61. Strobert, Donald D. The Effects of Ice Skating on the Balance of Trainable Mentally Retarded Children. Master's thesis. University Park, Pennsylvania: Pennsylvania State University, College of Health, Physical Education, and Recreation, August 1975.

62. "The Swedish Physical Fitness Trail." Challenge 9:3: 1, 6-7; March-April 1974.

Describes fitness trails that are found in Europe. These trails which can also be used effectively by impaired, disabled, and handicapped persons including mentally retarded individuals, provide comprehensive facilities for physical conditioning activities. An actual trail is usually one to three miles long extending through all kinds of terrain, including workout sites, and constructed in a manner to provide programs for jogging, walking, running, and even cross-country skiing for people of all ages.

63. "Team Physician for Handicapped." Physician and Sports Medicine 3:2: 25; February 1975.

Team physician for Minnesota Handicapped Skiers Association reports on equipment used by impaired persons who ski. Methods of adapting the sport and information about injury rate are discussed.

64. "Therapy on Ice." Town and Gown, February 1974.

The instructional ice skating program for physically and mentally handicapped children provided by Kurt Oppelt, Physical Educator at Pennsylvania State University, is described. Included are Oppelt's ideas of the values of ice skating as a therapeutic means for recovery of impaired individuals and several of his own methods of teaching beginning handicapped skaters. Oppelt's efforts in establishing an instructor training program in the area of therapeutic ice skating is also mentioned.

65. *Toker, Art, and Luray, Martin. The Complete Guide to Cross-Country Skiing and Touring. New York: Holt, Rinehart, Winston, 1973.

66. "Treating an Energetic Epileptic." Physician and Sports Medicine 3:4: 104; April 1975.

Team trainer and team physician of the New York Islanders hockey team have taken special precautions in case player Garry Howatt, who is an epileptic, has a seizure on the ice. Precautions are described.

67. Tulenko, K.D. "An Old Sport Cuts a New Figure." Parks and Recreation, November 1975. pp. 16-18, 40-41.

Increasing popularity of figure skating in the U. S. is discussed. History, figures, ice dancing, and free style skating are covered. Training and lifestyle of competitive skaters are mentioned.

* 68. Van der Smissen, Betty, and Goering, Oswald H. "Winter Activities." A Leader's Guide to Nature-Oriented Activities. Ames, Iowa: The Iowa State University Press, 1974. pp. 209-212.

Offers a number of useful winter activity possibilities. Among activities included are snow sculpture and painting, winter hobbies, social activities, camping, and carnivals, snow games, and reading for pleasure. Includes an extensive list of references.

Audio Visual Material

69. The Bold Challenge (16mm, color, sound).
Blind Outdoor Leisure Development, Box 3204, Aspen, Colorado 81611.

The Bold Challenge was developed to encourage and gain support for the development of local blind skiing clubs. It shows the process of training instructors as well as orientation of prospective blind skiers and the step-by-step educational methodology that is used. The film follows individual skiers through the process of learning to the point where they become competent skiers, and includes special safety precautions, psychological factors, and teaching techniques which may be very useful for individuals or groups interested in teaching skiing to blind individuals.

70. Cast No Shadow (16mm, sound, color, 27 minutes).
Professional Arts, Inc., Box 8484, Universal City, California.

(For abstract, see aquatics film list.)

71. A Matter of Inconvenience (16mm, color, sound, 10 minutes). Stanfield House, 900 Euclid Avenue, Santa Monica, California 90403.

On the wintery slopes of Lake Tahoe, Nevada, we meet an unusual, enthusiastic group of young people. All these skiers are either blind or an amputee. None, however, accepts the stereotype of helplessness. Instead, they exemplify the fact that an impairment or disability does not have to be handicapping. As the camera follows the skiers over the slopes, the impact of this distinction is very clear. Intermixed with shots of active participation are comments on why and how each has overcome his limitations.

72. Silent Skater (videocassette, sound and captioned, color, 28 minutes). Archives of the American Athletic Association for the Deaf, Edward Miner Gallaudet Memorial Library, Gallaudet College, Washington, D. C.

This special program recorded by WABH-TU, Boston, Massachusetts, presents hearing impaired/deaf figure skaters in a stirring demonstration of their beauty and skill during the VIII International Winter Games for the Deaf at Lake Placid, New York, in February 1974. Exhibitions include several girls in their teens going through individual skating routines to music as in any exhibition or competition. Two groups are shown in pair skating. An exhibition of barrel jumping is shown in which a young man from Canada leaps over 14 barrels. A special demonstration of a 21-year old blind skater from Delaware is also included. Presentation is captioned so that the video is appropriate for either hearing or nonhearing individuals.

73. ...Two, Three, Fasten Your Ski (16mm, color, sound, 17 minutes). Children's Hospital, 1056 East 19th Avenue, Denver, Colorado, 80218.

Although individuals of all ages with all levels and types of amputations are shown skiing, emphasis of this film is on children in general and participants of the ski program at Children's Hospital, Denver, in particular. Personnel involved in the program discuss values of skiing in rehabilitation, recreation, and therapy. One of the prime aims of the film is to create interest and awareness in skiing in amputees themselves and the general public.

74. VIII World Winter Games for the Deaf (videocassette (color) or videotape (black and white), sound, 28 minutes). Archives of the American Athletic Association for the Deaf, Edward Miner Gallaudet Memorial Library, Gallaudet College, Washington, D. C.

The VIII World Winter Games for the Deaf were held at Lake Placid, New York, during February 1975. During these Games, held for the first time in the United States, 150 athletes, representing 13

nations competed in 11 official and two exhibition events. Filmed highlights of Alpine ski events--downhill, slalom, and giant slalom, and Nordic ski events--individual and cross-country relays are shown. Interviews with several of the gold medal winners from Russia are included as English is translated to spoken Russian which is in turn translated into Russian signs and the reverse process for answers. Scenes from a hockey exhibition between teams from the United States and Canada are shown along with exerpts from figure skating exhibitions. Closing ceremonies are included as the director for the 1975 games speaks followed by the lowering of the official flag which will be used for the summer games in Bulgaria in 1977 and the IX Winter Games in Oslo, Norway, in 1979.

Assistive Devices and Adapted Equipment

75. Ankle Stabilizer Assistive Device.

This device is particularly useful for skaters with flat feet, mildly spastic feet or ankles, rolling heels, or mildly tight Achilles Tendons. Made from thermoplastic material, it is modeled to fit the contour of the skater's foot and Achilles tendon. A velcro strap secures the stabilizer around the ankle. Information about this device can be obtained by contacting: Ron Adams, Children's Rehabilitation Center, University of Virginia's Hospital, Rt. 250 West, Charlottesville, Virginia, 22901. (Various other types of stabilizers are now under research by the International Council in Therapeutic Ice Skating.)

76. The Balance Cage.

This device is designed to assist amputee skiers develop balance in initial attempts at skiing. By allowing skiers to experiment without falling, it greatly enhances learning processes; however, it should only be used in the first lesson and the instructor should remove the balance cage when it is evident that the student has begun to find his point of balance. For additional information see: National Amputee Ski Technique, page 66.

77. Modified Ski Pole.

Standard forearm crutches with attachment of lower portion of ski poles (approximately the lower twelve inches of the shaft including the basket) is one modification suggested for post-polio individuals who use two skies. For more information see National Amputee Ski Technique, page 73.

78. Outrigger

This device consists of a short ski, a Lofstrand or similar crutch, and a hinge device to connect them. Two outriggers are

used to form triangular points of support for skiers who are able to use only one leg. For more information, contact: Pauls Sports, Inc., Route 1, Box 615P, Excelsior, Minnesota, 55331. (Also available from the same company is "Flip Ski"--an outrigger built for both skiing and walking including an efficient breaking action.)

79. The Skating Aide

This device is patented, light-weight, collapsible, and costs about $19.95. It is designed to permit independent movement on the ice and give support so that the skater can stand and move without assistance. For more information about the Skating Aide device, contact Mr. Evan Armstrong; P. O. Box 244, Thief River Falls, Minnesota, 56701. (He also has a film show available which demonstrates skaters using the Skating Aide.

Additional Information

80. Haystack Mountain, Wilmont, Vermont, 05363.

Haystack Mountain has been reported as providing free equipment, instruction, and lift tickets for all handicapped persons, especially blind and amputees, who ski.

81. Canadian Ski Instructor's Alliance.

There are skiing programs for handicapped persons across Canada and the Canadian Ski Instructors' Alliance will give a list to anyone who requests it: CSIA, 350-3300 Cavendish Boulevard, Montreal, P. Q., Canada, H4B 2M8.

OUTDOOR ACTIVITIES

This section is indexed according to activities, handicapping conditions, and teaching methods. Numbers represent the sequential order of printed materails, audiovisual items, assistive devices/ adapted equipment, and additional information found in this section.

Materials in the following section designated by * do not pertain specifically to special populations. However, each has implication for and can be used in outdoor activities involving impaired, disabled, or handicapped participants. Materials in the following section designated by ** are available from Nomi Lorch, 108 LaRue Drive, Huntington, New York 11743

OUTDOOR ACTIVITIES

Bicycling

Printed Material

1. *American Academy of Pediatrics. Accident Prevention in Children: A Guide to Safety Education Curriculum in Primary and Secondary Schools. Evanston, Illinois: the Academy (P. O. Box 1034), n.d.

2. *American Alliance of Health, Physical Education, and Recreation. "Bicycling." Sports Safety. Washington, D. C.: the Alliance (1201 16th Street, N.W., 20036), n.d.

3. *Bicycle Blue Book. Acron, Ohio: Public Relations Department, Goodyear Tire and Rubber Co.

   Offered free of charge by the Public Relations Department of the Goodyear Tire and Rubber Company. Rules, traffic laws, night riding, safety tips, and bike maintenance are included along with a safety inspection list. Pictures, animated figures, and other means of visualization make this booklet appropriate for use with many mentally retarded children and those with learning disabilities.

4. *Bicycle Institute of America, 122 East 42nd Street, New York, New York, 10017:

   How to Plan Successful Bike Safety Programs
   Bicycle Film Catalog
   Bicycle Safety Tests
   Bike Fun
   Bike Ordinance in the Community
   Bike Racing on the Campus
   Bike Regulations in the Community
   Bikeways
   What's All This Jazz About Bikeways?

5. *Bicycle Manufacturer's Association of America, Inc., 1101 15th Street, N. W., Washington, D. C. 20005.

   Bicycle Safety Set (including care folder, safety league decal, safe driver's licence)
   Bicycle--Number One Sport (folder)
   Bikeways--A Plan for Community Recreation (folder)
   Bike Quiz Guide
   Bike Safety Posters
   Bike Safety Tests (booklet)
   Bicycle Club (booklet)
   Pedal Primer (folder)
   Bike Ordinance in the Community (booklet)

6. Buccola, Victor A., and Stone, William J. "Effects of Jogging and Cycling Programs on Physiological and Personality Variables in Aged Men." Research Quarterly 46:2: 134-139; May 1975.

7. "Cliffview.". Challenge 3:2; November 1967.

Describes outdoor education/recreation area in Hamilton, Ohio, which provides a bicycle trail, riflery, and a hiking trail for handicapped individuals.

8. Croucher, Norman. "Cycling." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High Street, W14,8NS), 1974. p. 46.

Examples of persons with handicapping conditions who participate in cycling are provided. Also describes use of assistive devices and tricycles for those who are more severely involved. Information resources from Great Britain are included.

9. *Department of the Interior and Transportation. Bicycling for Recreation and Commuting. Washington, D. C.: the Superintendent of Documents (U.S. Government Printing Office, 20402), n.d. 45¢.

Contains information concerning citizen participation in planning and funding bikeways, state legislative actions for promoting biking as transportation and recreation, federal assistance available for constructing and improving paths, other possible funding sources for cyclists seeking to expand needed facilities, and problems of theft and bike rider safety. Also includes a map of 29 trails presently designated as a part of the National Recreation Trail System.

10. Gruber, Glen A., and Meyer, Linda R. "Box Tandem." Challenge 10:3: 6; April-May 1975.

The Box Tandem, constructed by an instructor at the Paul A. Dever School (Taunton, Massachusetts), consists of two similarly sized bikes connected in parallel by several metal bars welded to frames of each bike. This apparatus is useful for teaching mentally retarded and physically disabled students who otherwise would not be able to participate in cycling because of their lack of balance and coordination. Instructions and a list of materials necessary for making the Box Tandem are included in the article.

11. Hanneman, Ralph. "Bicycles Provide Recreation Opportunities for the Blind." New Outlook for the Blind, February 1968.

12. Liatsos, Leon. "How to Use the Bike." Challenge 7:4: 8-9; March-April 1972.

Provides a suggested progression for teaching bicycling. Bicycle riding reminders and a list of important rules for safe cycling also included.

13. Little, Willard. "Bicycle Program: A Learning Experience." Pointer 19:3: 202-203; Spring 1975.

A program which allows institutionalized mentally retarded individuals to contract for bicycle use and to learn bicycle repair, maintenance, and safety skills.

14. *National Safety Congress. The Bike Book. Chicago, Illinois: the Congress (425 North Michigan Avenue), 1972.

15. Peller, James. "Bicycling Wheel-a-Way Down Path to Normalization and Physical Health." Mental Retardation News 22:1: 8; January 1973.

Describes initiation of a bicycle riding program for mentally retarded persons at Pacific State Hospital (Pomana, California). Various aspects of safety, program implementation, values of the activity, motivational techniques, and success of the program are included.

16. Peterson, Rolf A., and McIntosh, Eranell I. "Teaching Tricycle Riding." Mental Retardation 11:5: 32-34; October 1973.

A pedal training program was devised for eight children with various degrees of mental retardation. Reinforcers of food, social, and rest-play were used to train the children to pedal on a stationary vehicle. All eight children learned to ride regular tricycles.

17. Shapira, Will. "It's a New Ball Game for Hemophiliac Youngsters." The Physician and Sports Medicine 3:12: 63-64; December 1975.

A home therapy program that uses infusion of cryoprecipitate to prevent recurrent bleeding in hemophiliacs is described. One child's participation in sports illustrates the success of the program. Swimming, bicycle riding, playground basketball, flag and touch football, and youth baseball are appropriate activities for hemophiliacs.

18. Stahnke, Carl and Jo. "Sightriders: A Club Program for the Visually Handicapped." Bicycling, October 1975. pp. 33-35.

Sightriders are visually handicapped and blind cyclists who are teamed on tandems with sighted riders in the Knickerbikers of San Diego County, California. Bikes are issued to interested club members on a semi-permanent basis to eliminate the transportation problem. Physical strength is matched as much as possible. Information about starting a sightrider program is included.

19. *Schwinn Cycling Activities Department, 1856 North Kostner Avenue, Chicago, Illinois, 60639.

Camping and Touring (packet)
Includes information concerning what to take and where to ride, a story of a cross-country bike trip, and bicycle camping.

Educational Material (packet)
Contains: (1) The 4x's of Cycling--Ecology, Economy, Exercise, Exhilation; (2) Bicycling Course Outline--Maine West High School, Des Moines, Iowa; (3) Monroe Community College Bicycling Course Outline--S. Hamilton; (4) Safe and Sound Bicycling--Schwinn; (5) Brochure--League of American Wheelmen; (6) Wandering Wheels--Taylor University.

20. *Van der Smissen, Betty, and Goering, Oswald H. "Bicycling and Hosteling." A Leader's Guide to Nature-Oriented Activities. Ames, Iowa: The Iowa State University Press, 1974. p. 174.

Short description of cycling and hosteling is provided; information resources are given.

Audio Visual Material

21. Bicycle Riding Reminders (16mm, sound, color, 11 minutes). ATMS, P. O. Box 1010, Hollywood, California. 90028.

Especially designed for pre-school and primary grades. This film is appropriate for and can be used with various groups and classes of mentally retarded individuals. In addition to seeing children being checked out and demonstrating these rules, a special demonstration illustrates what happens when an automobile strikes a bicycle and its doll rider at 70 mph.

22. Not Just a Spectator (16mm, sound, color, 36 minutes). Town and Country Productions, 21 Cheyne Row, Chelsea, London SW3 5HP. Available in United States from Instructional Rehabilitation Film Library, 20 West 40th Street, New York, New York 10018.

(See Aquatics film list for abstract.)

Assistive Devices and Adapted Equipment

23. Bicycle Merry-go-Round.

A device which may be used to help youngsters gain confidence and get the feel of balancing, pedaling, and moving on a two-wheeler. This can be made from bicycle and pieces of pipe attached at a center hub by connecting two-wheel bicycle to free end of each piece of pipe.

24. Box Tandem. Taunton, Massachusetts: Glen Gruber (Paul A. Dever State School, 02780).

A description of this apparatus is provided in the abstract of the article by Glen Gruber.

25. Buddy Bar. Detroit, Michigan: Funway, Inc. (13930 Stansbury, 48227). $39.95 (plus $2.00 postage and handling).

The Buddy Bar is an attachment that joins two bicycles side-by-side a little over one yard apart. The bar attaches to the frame of each bicycle below the handlebars and allows both bicycles to be steered and pedaled. Persons with varying levels of mental retardation, individuals with cerebral palsy, and visually impaired persons have enjoyed bicycle riding with unimpaired buddies assisted by this type of device. It may be used for recreational bicycling, or for exercise to increase physical endurance. Funway, Inc. reports that installation is uncomplicated and takes only a few minutes.

26. Pedal Partner. Owatonna, Minnesota: Gandy Company (528 Grandrud Road, 55060). The price of $74.50 includes all mountings, hardware, and basket mounting brackets.

This apparatus is similar to the Buddy Bar.

27. Schwinn Tandem Bicycles. Chicago, Illinois: Schwinn Bicycle Company (1856 North Kostner Avenue, 60639). Twinn model $160.00; Delux Twinn model $190.00; Paramount racing model $760.00 (prices approximate).

Tandem (two-seater) bicycles are increasingly being used in physical recreation programs and for general fitness by handicapped individuals accompanied by an able-bodied person. Some examples of the tandem's current use are visually impaired persons with sighted partners, and mentally retarded or hearing impaired persons riding with non-impaired individuals for safety purposes. Schwinn makes four tandem models, all of which have adjustable handlebars and saddles. The Twinn model has a front hand brake and rear coaster brake; Deluxe Twinn has front and rear hand-operated brakes and five speeds. The Paramount models, 20 pounds lighter than the Twinns, are for racing. These are available in men's and women's (step through) styles with ten speeds and front and rear hand-operated brakes. Since both persons riding a tandem must pedal, at least one rider requires good leg strength; both riders must have good balance.

Additional Information

28. In a letter sent by Harmon Harris, January 12, 1976.

A related matter worthy of mention is that there are several physically handicapped and mentally handicapped members in our

club. They too, find great enjoyment in the world of the pedaliferous wheel. It seems that the steely steed is quite an equalizer! Young or old...male or female...handicapped or fully blessed; it just doesn't seem to matter--

For you and I, my shadowed friend
A-wheel to fly and seek road's end.
Beneath the glowing smile of Sun -
Two spin each mile in health as one.
Two feel the brush of a fluttering breeze
And hear its rush in the whispering trees.
Our strengthened chests and limbs of girth,
We've earned on crests of mother earth.
Our steely steed whereon we fly
Fulfills a need, for you an eye!

Yes, we do find a great love for fellow man in our program. Perhaps most important, we are not in the charity program business; it is a benefit program with instant payback for the supporters and for the participants. It's really a pleasure to operate.

29. Cycling Information.

Isadore Miron (2219 Ola Lane No. 5, Fort Worth, Texas, 76111) is a collector of sketches or ideas on three and four-wheeled vehicles for use by individuals with various handicapping conditions. His file is so vast that he may possibly have the world's largest collection of information on this subject. Since retirement a few years ago, Miron has spent a substantial amount of time tracking down information and has become quite an expert on parapelgic transportation. One of his major sources of data has been the annual international catalogue of equipment for physically handicapped children in collaboration with the International Cerebral Palsy Society. He is continually seeking more data on his special interest and welcomes inqueries about his collection or additional materials to add to his own vast compilation.

Fishing

Printed Material

30. Adams, R. C.; Daniel, A.; and Rullman, L. "Angling." Games, Sports, and Exercise for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 142-148.

Describes angling as an activity for physically impaired individuals. Includes descriptions on the American Casting Association, equipment, safety, how to cast, assistive devices, suggested course outline for an angling program, and program adjustments for specific disabilities.

31. Cabot, Elaine. "Everyone had a Good Time but the Fish." Modern Nursing Home 24:5: 75; 1970.

Describes combination picnic and fishing expedition of nursing home resident group. Focuses on food preparation related to dietary needs and the importance of pre-trip site inspection.

32. California Department of Agriculture. Mammoth Lake Campground: Planning a Facility for the Handicapped. San Francisco, California: the Department (Forest Service), n.d.

Describes in detail facility and design of Mammoth Lake Campground for the Handicapped (California; 300 miles north of Los Angeles). The Campground provides outdoor recreational opportunities for impaired individuals with the objective to construct facilities to accommodate handicapped people but yet to be similar to facilities used by non-handicapped persons. Among facilities provided are the campground, fishing pier, and nature trail.

33. Carson, George. "Ardent Blind Angler." The Sporting Goods Dealer, May 1967.

Describes Bill Alkemeyer, blind fisherman (Perryville, Missouri), and some techniques often used by blind individuals for fishing.

34. Cowart, Jim. "Angling, Archery, and Ping Pong for the Disabled." Pointer 19:2: 142-145; Winter 1974.

Described and illustrated are modifications of angling, archery, and ping pong equipment for skill development and recreation of persons with cerebral palsy.

35. Department of Interior, Bureau of Outdoor Recreation. "Fishing and Boating." Outdoor Recreation Planning for the Handicapped. Washington, D. C.: Superintendent of Documents (U. S. Government Printing Office), 1967. p. 13.

Modifications of facilities and equipment for fishing and boating are described.

36. "Fishing as Therapy." Outdoor Life, August 1973.

Provides information about Norton Sanders (University City, Missouri), handicapped fisherman, who has devised some of his own equipment for fishing and has taught a lot of other disabled people to fish.

37. Grosse, Susan T. Broadening Educational Experiences Through Outdoor Education. Milwaukee, Wisconsin: the F. J. Gaenslen School (1301 East Auer Avenue, 53212), n.d. 4 pages.

(For abstract, see Aquatics.)

38. "Handicaps Need Not Stop Fishing Fun." Fishing Facts, January 1973.

Fishing helps Norton Sanders on the road back to recovery.

39. Herndon, Cecil. "Handicap Doesn't Stop Fisherman." Kentucky New Era (Hopkinsville, Kentucky), October 17, 1975.

Provides background of Norton Sanders, widely known handicapped fisherman. Also mentions some techniques he uses and special devices which aide him in fishing.

40. Hile, Warren. Adventures in Camping for the Trainable Mentally Handicapped. Augusta, Michigan: the Program (Fort Custer State Home), 1970. 3 pages.

(For abstract, see Hiking and Nature Trails.)

41. Lincoln School Camping Program. Town and Country, Missouri: Special School District of St. Louis County (12110 Clayton Road, 63137), n.d. 6 pages.

(For abstract, see Aquatics.)

42. Lloyds, A. D. "The Blind in an Age of Science: Sports and Hobbies for the Blind." New Beacon 53:631: 287-290; November 1969.

(For abstract, see Aquatics.)

43. *Metcalf, Harlan G. "Simple Fishing Ways: How to Catch Fish Without Modern Tackle." Whittlin', Whistles, and Thingamajigs: The Pioneer Book of Nature Crafts and Recreation Arts. Harrisburg, Pennsylvania: Stackpole Books (Cameron and Kelker Sts., 17105), 1974. pp. 157-179.

Many ingenious techniques of fishing and methods of making fishing equipment provided. Some of this information may be useful for survival skills.

44. "OFY Group Helps Blind." Recreation Canada 30:4: 64; 1972.

Eleven university students, recipients of a 15,000 dollar opportunities for Youth Grant, are supervising and coordinating recreational activities for 2,700 blind residents in Toronto. Drama, music appreciation concerts, social gatherings, bus tours, yoga, barbeques, swimming, fishing, and horseback riding are some of the activities blind teens, adults, and senior citizens are doing.

45. Raymondjack, Jim. "Camp Lotsafun." Challenge 4:5: 4-5; May 1969.

Describes Camp Lotsafun (Monroe County, New York) which provides many outdoor activities for mentally retarded, perceptually handicapped, and emotionally disturbed youngsters. Going fishing week is one of the special events of the camp included.

46. Renken, Tim. "Fishing Lured Him Back to an Active Life." St. Louis Post Dispatch, July 25, 1965.

Provides information about Norton Sanders, handicapped fisherman.

47. Sanders, Norton. "I'm a Really Happy Angler." Fishermen's Digest, 9th edition. 2 pages.

Norton Sanders, disabled from a stroke in 1962, tells his personnel story of how fishing became a means of rehabilitation. Also describes some of the special equipment he developed that aids him in this activity.

48. "Sanders, Stroke Victim, Overcomes Handicap." St. Louis Jewish Light, March 7, 1973.

Fishing provides recreation and rehabilitation to Norton Sanders. He also combines his hobby with his livelihood by working in the sporting goods department at Anchor Distributors, Inc. (Clayton, Missouri).

49. Timnick, Lois. Untitled. St. Louis Globe-Democrat, Tuesday, August 12, 1975. One page.

The story of Norton Sanders, semiparalyzed from a stroke at the age of 44, his struggle toward recovery, and his views of his life and handicap are described. Sanders spends much of his time fishing and teaching other handicapped individuals the activity.

50. The United State Department of Agriculture, Forest Services. Descriptive Notes on Trout Pond Facilities. Tallahassee, Florida: Forest Supervisor (214 South Bronough Street, Box 1050, 32302), n.d. 7 pages.

Special facilities for handicapped individuals at the Trout Pond in Florida's National Forest near Tallahassee are described. Among special facilities is a fishing pier that is especially designed for people in wheelchairs.

51. *Van der Smissen, Betty, and Goering, Oswald H. "Casting and Fishing." A Leader's Guide to Nature-Oriented Activities. Ames, Iowa: The Iowa State University Press, 1974. 174-176.

Provides information on casting and fishing including ideas on instructional programing, competitive casting activities, and other special activities. References listed on pages 187-188.

52. "Will-a-Way Recreation Area." Journal of Health, Physical Education, and Recreation 43:1: 89; 1972.

(For abstract, see Aquatics.)

Audio Visual Material

53. Challenge: A Camp for all Seasons (16mm, sound, color, 12 minutes). Easter Seal Society of Florida, 231 East Colonial Drive, Orlando, Florida, 32801.

(For abstract, see Aquatics film list.)

54. Not Just a Spectator (16mm, sound, color, 36 minutes): Town and Country Productions, 21 Cheyne Row, Chelsea, London SW3 5HP. Available in United States from Instructional Rehabilitation Film Library, 20 West 40th Street, New York, New York, 10018.

(For abstract, see Aquatics film list.)

55. Pine School Summer (16mm, sound, black/white, 10 minutes). James Andrews, 219 River View, Iowa City, Iowa, 52240.

(For abstract, see Hiking and Nature Trails film list.)

Assistive Devices and Adapted Equipment

56. "Retreevit" Reel

This is a 7' fly-rod which allows fishermen to retrieve fish without transferring the rod to the other hand. It costs about $15.00 and is made by the Dewitt Plastic Company, Auburn, New York.

57. The Garcia Handi-Gear

This is a harness device designed to allow physically impaired individuals, particularly persons with upper body limb limitations, to participate in angling activities such as plug casting, bottom fishing, and trolling. The Handi-Gear is a light, aluminum harness which has a holding tube meant to hold the fishing rod in place after the cast. It may be obtained from: Garcia Corporation, 329 Alfred Avenue, Teaneck, New Jersey, 07666.

58. Vargus Fishing Aid Rod Holder Company, 5453 Norwalk Boulevard, Whittier, California, 90601.

59. Old Pal

An electric fishing reel made by the Woodstream Corporation.

Printed Material

60. Barton, Barbara. Lake Confidence Trail. Brainerd, Minnesota: Camp Confidence (Box 349, 56401). 15 pages.

Provides a collection of possible activities and interpretations for use along the 1/4 mile Lake Confidence Trail.

61. Bott, Kristine, and Bannasch, Donald. "Hikes and Scavenger Hunts." Discovery: Guidelines for Establishing an Outdoor Education Program in Special Education. Mount Clemens, Michigan: Macomb Intermediate School District (44001 Garfield Road, 48043), 1975. pp. 339-349.

Suggests methods and procedures in the sequence necessary to set up and carry out hiking activities as an outdoor laboratory experience. Included are ideas for school planning such as safety tips, practice, and things to make for the outdoor education experience in hiking. Also provides a chart listing 16 different types of hikes with activity suggestions for each one including activities along the way, activities at the site, and games to play or songs to sing. Hints and ideas for scavenger hunts and trail fun are included and an extended list of references are provided at the end of the manual.

62. Brett, James J. "Oerwood Braille Trail." The Seer 41:2: 7-10; June 1970.

63. Brett, James J. "Pathways for the Blind." The Conservationist (State of New York, Department of Environmental Conservation) 25:6: 13-16; June-July 1971.

64. Cable, Louis A. "The Blind 'See' the World of Nature on the Braille Trail." Journal of Health, Physical Education, and Recreation 43:1: 85; 1972.

Braille Trail in Bucks County, Pennsylvania, at the Churchville Outdoor Education Center consists of a 1000 ft. route through wooded open areas which is followed by means of a nylon rope. Hikers are given Braille Books which describe eleven points of interest along the way, marked by posts.

65. California Department of Agriculture. Mammoth Lake Campground: Planning a Facility for the Handicapped. San Francisco, California: the Department (Forest Service), n.d.

Describes in detail facility and design of Mammoth Lakes Campground for the Handicapped (California, 300 miles north of Los Angeles). The Campground provides outdoor recreational opportunities for impaired individuals with the objective to construct facilities to accommodate handicapped people but yet to be

similar to facilities used by non-handicapped persons. Among facilities provided are the campground, fishing pier, and nature trail.

66. Camp Confidence. Sylvan Trail - Camp Confidence. Brainerd, Minnesota: the Camp (Box 349, 56401), n.d. 5 pages.

Descriptive notes for further appreciation of the 1/3 mile nature trail at Camp Confidence are provided.

67. Carroll, Arthur J. "Efforts to Adapt National Forest Recreation Areas for Use by the Handicapped." Therapeutic Recreation Journal, First Quarter 1973. pp. 41-44.

Describes improving opportunities of outdoor recreation for disabled individuals on national forest lands. Particularly deals with the search for design criteria to determine what is to be constructed, why facilities are constructed, and how facilities are constructed for handicapped persons. Also lists National Forests and recreation sites accommodating the impaired, disabled, and handicapped. Mr. Carroll is District Ranger, Otai Ranger District, Los Padre National Forest, Otai, California.

68. "Cliffview." Challenge 3:2; November 1967.

Describes outdoor education/recreation area in Hamilton, Ohio, which provides a bicycle trail, riflery, and a hiking trail for handicapped individuals.

69. Collins, Janice. "The Braille Trail." Trends in Parks and Recreation (National Recreation and Park Association) 5:2: 1-3; April 1968.

70. Croucher, Norman. "Rambling." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High Street, W14,8NS), 1974. pp. 43-44.

Rambling is an activity described as walking through areas such as countryside lanes, bridleways, and footpaths through fields and woods. Special rambling clubs and associations for disabled people and wheelchair ramblers are described. Addresses of information sources from England are also included.

71. Edson, Tom. "Walks, Rambles, and Strolls: A Multiple-Sensory Approach Just for the Wonder of It." Challenge 7:2: 1,9; November-December 1971.

Walks, rambles, and strolls are described as relaxing, informal activities which provide ways of stimulating, using, and enjoying the senses. A sound walk, a nose stroll, a touch ramble, and a wonder walk are among examples of such activities provided.

72. "Fish Creek Falls Discovery Trail." Northwest Colorado BOCS Newsletter. Steamboat Springs, Colorado: Northwest Colorado Board of Cooperative Services, Child Study Center (Box YY, 80477), October 23, 1975. p. 1-2.

Unique nature trail constructed at Fish Creek Falls near Steamboat Springs, Colorado, designed especially for those with learning disabilities and intellectual handicaps is described.

73. Floyd, John Alex, Jr. An Investigation into the Physical and Psychological Response of the Visually Handicapped to Some Selected Woody and Herbaceous Plant Material. Unpublished master's thesis. Clemson, South Carolina: Clemson University, March 1972.

74. Garvey, Joseph M. "Touch and See." Parks and Recreation 4:11: 20-22; November 1969.

The Touch and See Nature Trail at the National Arboretum in Washington, D. C., gives the blind visitor an opportunity to explore his surroundings on a path through a native hardwood forest. The blind person is led along the 820-foot trail by a guide rope. Stations at intervals provide information about the surroundings in Braille.

75. Garvey, Joseph M. "Touch and See Nature Trail." Science and Children (National Science Teacher Association) 6:2: 20-22; October 1968.

76. Grosse, Susan J. Broadening Educational Experiences Through Outdoor Education. Milwaukee, Wisconsin: the F. J. Gaenslen School (1301 East Auer Avenue, 53212), n.d. 4 pages.

77. Hile, Warren. Adventures in Camping in the Trainable Mentally Handicapped. Augusta, Michigan: the Program (Fort Custer State Home), 1970. 3 pages.

Provides a summary of the Title I sponsored camping program for the mentally handicapped at Fort Custer State Home (Augusta, Michigan) that was held in the summer of 1970. Activities included in the program were gardening, nature study, hiking and trail blazing, swimming, archery, casting and angling, air riflery, outdoor crafts, tent camping, physical fitness, and music. Evaluation of the activities, total cost of the program, and overall results are also provided.

78. Knorr, John. A United States Guide to Nature Centers and Trails for the Visually Handicapped. Madison, Wisconsin: Center for Environmental Communications and Environmental Studies (602 State Street), 1973. 14 pages.

This guide lists nature centers and trails for visually handicapped individuals by state. It lists the facility, name, location,

administering agency or organization, trail length, land base of the area, and availability of special interpretive programs. Also included is a list of fragrance gardens in the United States though descriptive information is not provided, and a supplemental list of references to provide additional background information on interpretive services for the blind.

79. Lewis, Robert B. "A Self Guiding Nature Trail for the Blind." Outdoor Recreation Planning for the Handicapped (Bureau of Outdoor Recreation), April 1967. pp. 17-19.

A description of the self-guiding nature trail located near Aspen, Colorado is provided along with an account of the importance of providing such facilities in the outdoor environment for blind individuals.

80. Lloyds, A. D. "The Blind in an Age of Science: Sports and Hobbies for the Blind." New Beacon 53:631: 287-290; November 1969.

(For abstract, see Aquatics.)

81. National Recreation and Park Association. Untitled. Communique 2:9: 18; September 1971.

82. Northwest Colorado BOCS Child Study Center. Fish Creek Falls Discovery Trail Replication Manual. Steamboat Springs, Colorado: the Center (Box YY, 80477), n.d. 14 pages.

Describes an unusual project which was to design and construct a nature trail which could be used and appreciated by people with learning disabilities and intellectual handicaps. It is to present to individuals of limited intellectual and learning abilities basic things within their natural environment in such a manner as to reduce the amount of written language and technical terminologies by utilizing more meaningful methods of communication.

83. Shriver, Eunice Kennedy. "One Person Makes a Difference." Parks and Recreation 10:12: 39; December 1975.

(For abstract, see Winter Activities.)

84. Spinelli, Anthony. "Successful Trails for the Blind." Environmental Education 3:4; Summer 1972.

85. Spinelli, A., and Earley, J. "Dual Nature Trails Use Both Braille and Printed Markers for Use of Visually Handicapped Campers." Camping Magazine 44:19; March 1972.

86. Stone, E. H. "There's a Wheelchair in the Woods." Parks and Recreation 6:12: 19-21,48-49; December 1971.

Self-guiding trails and other outdoor recreation facilities designed by the U. S. Forest Service for use by disabled persons are discussed. Detailed descriptions of the Roaring Fork Trail near Aspen, Colorado, the Mammoth Lakes Campground in the Inyo National Forest in the Sierra mountains, and the Trout Pond Recreation Area in Western Florida are provided. These facilities include paved trails and paths, picnic tables with guard rails, and restrooms adapted for wheelchairs.

87. The United States Department of Agriculture Forest Service. Descriptive Notes on Trout Pond Facilities. Tallahassee, Florida: Forest Supervisor (214 South Bronough Street, Box 1050, 32302), n.d. 7 pages.

Special facilities for handicapped individuals at the Trout Pond in Florida National Forest near Tallahassee are described. Nature trails especially constructed for wheelchair users are among those facilities provided.

88. Vancon, Nancy. "Space to Grow." Rehabilitation Around the World 21:5,6: 10-15; 1970.

An outing by 30 disabled children in the Washington National Forest of Virginia is described. Most of the children were mentally retarded. Music, art work, minerology, and special trails for the disabled were utilized to expand the world of these children. Facilities for disabled are being built and enlarged at other parks. About 40 older disabled adult workers are employed by the United States Forest Service.

89. *Van der Smissen, Betty, and Hoering, Oswald H. "Hiking." A Leader's Guide to Nature-Oriented Activities. Ames, Iowa: The Iowa State University Press, 1974. pp. 180-183.

Information on planning a hike, suggested techniques, and resources are provided.

90. "Will-a-Way Recreation Area." Journal of Health, Physical Education, and Recreation 43:1: 89; 1972.

(For abstract, see Aquatics.)

Audio Visual Material

91. Pine School Summer (16mm, sound, black/white, 10 minutes). James Andrews, 219 River View, Iowa City, Iowa, 52240.

This film records two phases of a summer school outdoor education program for culturally disadvantaged educable mentally retarded children. Phase I deals with instruction in the classroom and on the playground in science, recreation, camping, and homemaking as each relates to camping and outdoor education. In Phase II,

nature activities, hiking, fishing, other types of recreational activities, and camp chores are shown in the camp setting. Phase III, not shown in this film, consists of a reevaluation of participants and their evaluation of the project.

Additional Information

92. Elephant Rocks State Park

The Elephant Rocks State Park Braille Trail opened and designated as a National Recreation Trail in October of 1973 is being expanded with several alternative loops to accommodate wheelchair bound visitors. For more information contact: William Wright, Director, Division of Parks and Recreation, Missouri Department of Natural Resources, P. O. Box 176, Jefferson City, Missouri, 65101.

Horseback Riding

Printed Material

93. Adams, R. C.; Daniel A.; and Rullman, L. "Horseback Riding." Games, Sports and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 191-200.

Describes many aspects of horseback riding for physically impaired individuals including its therapeutic value, special assistive devices, program adjustments for specific disabilities, equipment, and techniques of riding. Diagrams and illustrations also included.

94. Bain, A.M. "Pony Riding for the Disabled." Physiotherapy (England) 51: 263-265; August 1965.

95. Bauer, Joseph J. "Dressage and the Handicapped Rider." The Chronicle of the Horse, November 1972. (Also in NARHA News 3:3: 1-2; November 1975.)

Suggests introducing the principles of basic 'dressage' to those handicapped riders who have gone past or reached the stage in which they are permitted to walk or trot their horses and are in need of further motivation. He claims that involving the handicapped rider in dressage and in a simple range of exercises will help revive the interest of this group of riders, improve their coordination, and also induce them to use muscles that they have perhaps long since given up hope of using.

96. Bauer, Joseph J. "Horses Were My Therapists." The Chronicle of the Horse, December 30, 1966.

Author describes personal experiences of how horseback riding aided him toward recovery from his physical disabilities.

97. Bauer, Joseph J. "Toronto's Community Association for the Disabled." The Chronicle of the Horse 34:18; January 15, 1971.

The Community Association for Riding for the Disabled (C.A.R.D.) which formally came into existence in the spring of 1968 under the direction of Joseph Bauer is described.

98. **Allen, Doreen. Pony Riding for the Disabled. (Booklet from England.)

Describes the nature of spastic cerebral palsy and discusses specific needs of handicapped riders.

99. Bauer, Joseph J. Riding for Rehabilitation: A Guide for Handicapped Riders and Their Instructors. East Toronto, Ontario, Canada: Canadian Stage and Arts Publications, Ltd. (49 Wellington Street), 1972.

This volume deals with technical problems that confront a handicapped horseback rider as well as his instructor and assistants. Provided is a detailed description of equipment and methods employed by the author and a number of European organizations prominent in the field of riding for the handicapped. The author also recounts how riding was therapeutically beneficial to him in overcoming disabling results of sciatica and several major accidents, and how he helped organize a group to sponsor riding possibilities for handicapped adults and children. Seventy-eight photographs illustrate useful adaptations of riding equipment and specific teaching or riding techniques.

100. Bicknell, Joan. "Tall in the Saddle." Mental Health, Autumn 1970. pp. 29-31.

The provision of horseback riding facilities for disabled persons create a feeling of independence, mobility, and realization that the animal is responding to directions. Both hospitalized and home patients participate in several riding groups that have been organized for disabled children. Volunteer help is often essential to the success of these groups.

101. Bond, Marian. "Winning at the Brass Ring." The Western Horseman, April 1974. pp. 36, 142-144.

Describes how the Brass Ring, a nonprofit riding center for handicapped individuals and a branch of the National Foundation of Happy Horsemanship for the Handicapped, Inc., was formed. The idea for the Brass Ring was originated by Mrs. Liz Lukather (herself crippled from polio in her childhood) and is now run by her with the assistance of her husband and Paul Hughes, the owner of the facility they use in Ontario, California.

102. Bridson, Malcolm. "The Diamond Riding Centre for the Handicapped." Riding (Great Britain), October 1975. pp. 4-14.

This article would be of particular interest to stable owners needing information on the planning, layout, work, management, and equipment necessary for a riding center developed for the instruction of handicapped students.

103. **Brown, Octavia J. Horseback Riding as Therapy. (Reprinted from Recreation Exchange, New Jersey Association for Retarded Children, March-April 1973.)

Discusses benefits of riding for mentally retarded persons. Among those benefits described are: improved self-esteems, improved attention span and educational skills, and the possibility of preparation for a future job working with animals.

104. **Brown, Octavia Chater. Horseback Riding as Therapy: A Description of the Implications of the Horsemanship Program for the Treatment of Patients, February 1970. (unpublished)

Discusses benefits of riding for psychiatric patients and ways in which emotional difficulties affect individual's approach to riding situations and his ability to ride.

105. **Brown, Octavia Chater. Report on the Handicapped Children's Preschool Riding Program, June 1971. (unpublished)

Reactions of handicapped preschool children to a riding program are described. Also discusses activities of the program and its observed and potential benefits to the children.

106. Busack, Cathe. "Manual Communication with Deaf Riders." NARHA News 13:3: 8-9; November 1975.

This article presents descriptions and diagrams of a series of gestures that have been developed by the Cheff Center for the Handicapped used by instructors for communication with deaf riding students.

107. Croucher, Norman. "Riding and Pony Trekking." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High Street, W14,8NS), 1974. pp. 47-48.

Includes description of the Riding for the Disabled Association, an organization in England that offers horseback riding to people who have many different types of disabling conditions. Also provides information on available publications and films, establishments outside the R.D.A. and whom to contact in England.

108. Davies, John A. The Reins of Life: An Instructional and Informative Manual on Riding for the Disabled. London, England: J. A. Allen, 1967.

Describes the special considerations needed for teaching riding to physically disabled persons and information for the beginner and advanced rider. Also provides exercises and games.

109. "Disabled Learn to Ride at Happy Horseman School." The Pennsylvania Horse 2:4: 29; August 1969.

110. *4-H Horsemanship Programs, Chicago, Illinois: National 4-H Service Committee (150 N. Wacker Drive, 60606), n.d.

These publications, Unit I--Horses and Horsemanship and Unit II--Horse Science, provide educational information including diagrams, illustrations, charts, and glossary of terms concerning horses, horsemanship, and horse care. Subjects covered in Unit I are: breeds of light horses; colors and color markings of horses; judging horses--what to look for and how to judge; gaits of the horse; western horsemanship; tack and equipment and its care; grooming and preparation for show; showing light horses at halter; care of horses feet; training the horse; and safety rules and precautions. Unit II covers the subjects: behavior and nature of the horse; functional anatomy and action; unsoundness and blemishes; determining the age of a horse by its teeth; principles of reproduction in horses; how inheritance works in horses; nutrients, balancing rations, and feeding horses; health and sanitation principles important in horse care; and disease problems of horses. (These manuals have been produced in Braille and are on tape. For more information contact: Mrs. Jean McCally, 3106 33rd Place, N. W., Washington, D. C., 20008.)

111. **Freer, Lyn, and Tscharnuter, Ingrid. Horseback Riding for the Handicapped, April 1974, 4 pages. (unpublished)

Describes a riding program for cerebral palsied children and the potential benefits that it provides.

112. "Ignored Program Irks Ex-Resident." New Castle News (Pennsylvania), July 1975.

This article points out the concern of Mrs. Jean McCally, Director of the Capital Area Association for Therapeutic Horsemanship (Maryland), that many people may not be aware of the national scope, variety, and beneficial effects horseback riding programs for handicapped persons that are available in America.

113. Gordon, Eleanora and Stewart, and Bannie, M. "Riding Programs and Mental Retardation." Challenge 11:2: 1,3; December 1975/ January 1976.

114. Gordon, Eleanora C. and Stewart, Bannie M. "Riding Programs and Mental Retardation." North American Riding for the Handicapped Association News 3: 1-3; June 1975.

Uses case studies to illustrate the benefits of a riding program on several institutionalized moderately to severely retarded boys and girls, most of whom were nonverbal.

115. Greenhall, Joan E. "Horses, Parents, and the Handicapped Child." The Quarter Horse Journal, March 1972.

116. Gwynne, Esther. "Child, 6, Rides in Style Despite Her Handicap." Evening Tribune (San Diego, California), April 1, 1969. 2 pages.

Six-year old girl, victim of a rare nerve disease, makes progress through horseback riding instruction at a program in California associated with the National Foundation for Happy Horsemanship for the Handicapped.

117. **Harpoth, Ulla. "Horseback Riding for Handicapped Children." Physical Therapy 50:2: 235-236; February 1970.

Brief description of a German riding tournament for disabled individuals and a number of European programs which offer riding for the handicapped is provided.

118. **Haskin, M. R.; Erdman, W. J.; Bream, J.; and MacEvoy, C.G. "Therapeutic Horseback Riding for the Handicapped." Archives of Physical Medicine and Rehabilitation 55: 473-474; October 1974.

Describes the program at Thorncroft Equestrian Center, Malvern, Pennsylvania, and provides case histories which reported improvements in posture, balance, walking ability along with the psychological benefits seen after several months of riding.

119. Hatton, Helen. "Handicapped Ride Tall." Enquirer and News (Battle Creek, Michigan), April 12, 1970.

Describes dedication ceremony of the Cheff Center Foundation for the Handicapped.

120. Henriksen, J. D. "Horseback Riding for the Handicapped." Archives of Physical Medicine and Rehabilitation 52: 282-283; 1971.

121. Hillinger, Charles. "Handicapped Vet Horseman." Austin American Statesman (Austin, Texas), Thursday, January 8, 1976.

Describes Jim Brunotte, 28-year old Vietnam veteran who lost both of his legs, one arm, and one eye, and now not only competes in horseback riding but runs his own non-profit recreation ranch for handicapped persons in Creston, California.

122. Hinkamp, Carol. "Blind Rider Shows in Open Classes." The Chronicle of the Horse, April 11, 1975. pp. 45-47.

The story of a 13-year old blind girl and her successful and rewarding experiences in horseback riding is described.

123. "Horseback Riding for Handicapped Children." Physical Therapy 50:2: 235-236; 1970.

Physical therapists have used horseback riding as a special therapy for mentally and/or physically disabled persons. Horseback riding promotes relaxation in patients with spastic paresis.

124. "Horses Can Help the Handicapped." Maine Sunday Telegram (Philadelphia), June 8, 1975.

Jennifer Bream, top British horsewoman, describes many ways in which horseback riding serves as rehabilitation for handicapped children.

125. "Horses Help Handicapped Children." Hoofs and Horns (Australia), August 1970. p. 74.

126. Jacques, Norah. "Riding for the Disabled--How It All Began." Spastic News 3: 8-10; October 1967.

127. Kuhlthaw, Linda. "Equitation for the Cerebral Palsied: The Advantages of Using the Western Saddle." Interclinic Information Bulletin 11:8: 9-12,17; May 1972.

Describes how a spastic cerebral palsied person can be a functional horseback rider when a western saddle is used which enables him to sit independently and use muscles of his lower extremities. Disadvantages of the English saddle, which necessitate binding the rider in the saddle, are pointed out. Mounting, dismounting, and seating skills are illustrated by photographs in which the rider uses a western saddle.

128. Kuyoomjian, Sheila. "The Outside of a Horse is Good for the Inside of Man." Equestrian Trails 36:7: 36; January 1971.

129. Larkins, Carolyn. Horsemanship for the Physically Handicapped: Notes on Instruction. Charlottesville, Virginia: University of Virginia Hospital. Article, "Horsemanship for the Physically Handicapped." Inter-Clinic Information Bulletin 9:7: 4-11; 1970.

Provides notes on instruction of proper riding techniques and grooming. Includes pictures and illustrations.

130. Lattin, Diane. "Not Just Horsing Around." Performance 25:9; March 1975.

131. "Legless Cowboy to Expand Ranch for the Handicapped." Paraplegic News 29:328: 52; January 1976.

Jim Brunotte, 28, a double leg amputee also having only one arm and one eye from Creston, California, participates in speed riding and other competitions. He has also organized and runs a non-profit corporation recreational ranch for handicapped individuals.

132. Lincoln School Camping Program. Town and Country, Missouri: Special School District of St. Louis County (12110 Clayton Road, 63137), n.d. 6 pages.

(For abstract, see Aquatics.)

133. Lloyds, A. D. "The Blind in an Age of Science: Sports and Hobbies for the Blind." New Beacon 53:631: 287-290; November 1969.

(For abstract, see Aquatics.)

134. May, E. E.; Waggoner, N. R.; and Hotte, E. B. Independent Living for the Handicapped and the Elderly. Houghton Mifflin, 1974.

135. McCowan, Lida L. It is Ability That Counts: A Training Manual on Therapeutic Riding for the Handicapped. Olivet, Michigan: The Olivet Press, Olivet College, 1972.

This publication is based on the experience of the author as executive director and head instructor of Cheff Center for the Handicapped, Augusta, Michigan, as she provided necessary leadership to develop therapeutic horseback riding programs. Although covering subject matter in depth, this book is written simply and directly in language easily understood by anyone interested in developing programs of this nature. Specific chapters deal with program organization, day-to-day administration, selection of mounts and stable management, training of mounts, and therapeutic riding.

136. McCowan, Lida L. "Riding for the Handicapped." Quarter Horse Journal, March 1972.

Describes the Cheff Center Foundation for the Handicapped -- its beginning, its program, and hopes for the future.

137. McCowan, Lida. Riding for the Handicapped: Its Beginning--Its Future. Augusta, Michigan: Cheff Center for the Handicapped (Box 171, 49012), n.d. 11 pages.

History of the development of therapeutic horseback riding, special consideration necessary for providing programs for handicapped individuals including safety standards recommended by the North American Riding for the Handicapped Association.

and finally future considerations for insuring provision and acceptance of such programs are described.

138. North American Riding for the Handicapped Association, Inc. Annual Report and Journal. Cedar Rapids, Iowa: the National Office (2300 Ridgeway Drive, S. E., 52408), 1975. 40 pages.

Contains information regarding setting up new programs, how to apply for accreditation, and names and addresses of existing programs and supporters.

139. "OFY Group Helps Blind." Recreation Canada 30:4: 64; 1972.

Eleven university students, recipients of a 15,000 Dollar Opportunities for Youth Grant, are supervising and coordinating recreational activities for 2700 blind residents in Toronto. Drama, music appreciation, concerts, social gatherings, bus tours, yoga, barbeques, swimming, fishing, horseback riding, are some of the activities blind teens, adults, and senior citizens are doing.

140. **Pagamenta, D., and Peacock, G. Special Equipment for the Disabled Rider. Cirencester: Earle & Ludlow. (19-page pamplet put out by the British Riding for the Disabled Association.)

Describes special devices and adaptations of standard equipment which have been used for disabled riders.

141. Peacock, G. F., and Saywell, S. Introduction to Riding for the Disabled. Warwickshire, England: Riding for the Disabled Association (National Equestrian Center, Kenilworth, CU8,2LR), n.d.

142. **Pettit, P. F. "Physical Education and Sports for the Multiply Handicapped Child." Physiotherapy (United Kingdom) 60:2: 47-49; February 1974.

Describes a program for mentally retarded and cerebral palsied children which includes horseback riding among other sports which provide recreation and opportunities for competition against other handicapped children.

143. "Program for Handicapped." Outdoor Recreation Action 38:7; Winter 1975.

Brief section describes and provides the address of Ultimate Ski Tours, Inc., a program which offers skiing to persons having any type of disability. The program is also a part of year-round sports oriented tours including camping, horseback riding, canoeing, scuba diving, and sailing for handicapped individuals.

144. "Program Studies Rehabilitation." Daily Local News (West Chester, Pennsylvania), Thursday, November 20, 1969. 1 page.

Describes television documentary program "Ward 4-D" (telecast on KYW-YU3, November 30, 10 p.m.) which presents the daily life of four young amputees dealing with their physical rehabilitation and social adjustment at the Valley Forge Military Hospital. Part of the rehabilitation program includes horseback riding.

145. Rayds, E. "Riding and Mentally Handicapped Children." Parents Voice 24:2: 7-8; June 1974.

Horseback riding is discussed as a commonly used therapy for mentally handicapped children in the United Kingdom which results in increased mental ability and improved morale and self-concept.

146. Regester, B. S. "Riding as a Treatment for the After Effects of Poliomyelitis." Rehabilitation, 1959. pp. 31-32.

147. "Riding for the Disabled: A Role for the Veterinarian." Veterinary Record 91: 388-389; October 14, 1972.

148. Riding for the Disabled Association. Annual Journal. Warwickshire, England: the Equestrian Center (Kenilworth, CU8,2LR), 1971, 1972, 1973, 1974, 1975.

These journals include the Association's Constitution, reports on riding programs of member groups, and synopses of several talks presented at annual meetings. Also provides letters from riders and parents.

149. Riding for the Disabled Association. Hints for Helpers. Warwickshire, England: National Equestrian Center (Kenilworth, CU8,2LR), n.d.

150. "Riding for the Disabled." National Equestrian Centre Official Review. Warwickshire, England: the Equestrian Center (Kenilworth, CU8,2LR), 1969. p. 29.

151. Rosenthal, Sol Roy. "Risk Exercise and the Physically Handicapped." Rehabilitation Literature 36:5: 144-149; May 1975.

Physically handicapped children participated in horseback riding which is a risk exercise (RE) sport. Findings included feelings of elation to euphoria and increase in mobility, motivation, and courage.

152. Rosenthal, Sol Ray. "Risk Exercise." The Chronicle of the Horse 34:4: 44; September 11, 1970.

153. Scott, Nancy. "Riding for the Handicapped." Recreation for the Handicapped: Report on the Australian Conference on Recreation for the Handicapped (Melbourne), February 1974. pp. 69-71.

The Pony Riding for the Disabled Association (now at Moggill, Australia), directed by Mr. and Mrs. McIntyre, is described. Activities and successful effects of the program for handicapped children are discussed.

154. Scott, N.H. "Pony Riding for the Disabled in Queensland." Rehabilitation in Australia, October 1971. pp. 10-11.

Describes the Pony Riding for the Disabled Association (Kenmore, Brisbane) led and organized by Mr. and Mrs. Peter McIntyre who work with children from the Montrose Home for Crippled Children and Spastic Centre.

155. Shriver, Eunice Kennedy. "One Person Makes a Difference." Parks and Recreation 10:12: 39; December 1975.

(For abstract, see Winter Activities.)

156. Smith, J. Y. "Horse Sense Helps the Handicapped." The Washington Post (Washington, D. C.), December 15, 1973. 2 pages.

Rock Creek Park Horse Center, Inc. (Washington, D. C.), run by Robert Douglas with assistance of Mrs. Jean McCally, offers rehabilitation to children with a variety of handicapping conditions.

157. Smith, J. P. "In What Sports Can Patients with Amputations and Other Handicaps Successfully and Actively Participate?" Physiotherapy (United Kingdom), 50:1: 121-126; January 1970.

158. Sneed, Jane. "Riding Builds Confidence for the Handicapped." Horse and Show, August 1970.

159. Spiss, Kathie. "Handicapped Riders at the Adobe Ranch." The Western Horseman 35:11: 90; November 1970.

160. Springston, Marcia. "Teaching the Blind to Ride." Riding for the Disabled Association Annual Journal. Warwickshire, England: the Equestrian Center (Kenilworth, CU8,2LR), 1972.

The author, herself a visually impaired rider, provides some very useful and practical suggestions for teaching blind individuals to ride.

161. Swan, Mae. "Heaven on Earth." Equestrian Trails 36:7: 1; December 1971.

162. Le Vander; Val. "Horse Therapy Helps." The Times (Ellicott City, Maryland), Saturday, June 14, 1975. 1 page.

Describes incidents of a horse show put on by a group of emotionally disturbed children of the Linwood Children's Center (Maryland) directed by Mrs. Jean McCally, head of the Horse Therapy Program at the Columbia Horse Center.

163. Winter, Nancy H. "The Influence of Riding on the Learning Disabled." North American Riding for the Handicapped Association News 3:57; June 1975.

The rationale for a riding program for learning disabled children is presented. Methods of instruction are also detailed.

164. "West Horsley Group Riding for the Disabled." Playing Fields 36:2: 27,29-31; April-June 1975.

Audio Visual Material

165. Exceptional Equestrians (16mm, sound, color, 19 minutes). Winslow Riding for the Handicapped Foundation, RD 1, Box 369, Warwick, New York 10990.

Horseback riding has been utilized for therapeutic and recreational purposes more extensively and intensively in European countries than in the United States. However, recently efforts have been increasing in this country as evidenced by the presentation in this film which focuses and deals with therapeutic aspects of equestrian activities. Riders must adjust to movement of the horse, maintain their heads in an upright position in the midline of the body, and are able to perform various exercises and activities emphasizing balance, activities of daily living, and range of motion activities while on the horse. Motivation, even of the young who may be introduced to the program simply by sitting on a horse, is great as participants many times do things on and with the horse that they can't or won't do off them. Even conventional exercises are done over the horse with enthusiasm. Expressions of participants throughout the film reflect their total involvement and enjoyment of this activity. In addition to the many obvious physical values and contributions, opportunities to participate in a program of this type result in improvement and progress in sensory stimulation, self-image, and confidence. Volunteers and their role in the program is shown as children of various ages and with a variety of handicapping conditions are shown actively taking part in diverse activities and exercises on and off horses.

166. Not Just a Spectator (16mm, sound, color, 36 minutes). Town and Country Productions, 21 Cheyne Row, Chelsea, London, SW3 5HP. Available in United States from Instructional Rehabilitation Film Library, 20 West 40th Street, New York, New York 10018.

(For abstract, see Aquatics film list.)

167. Riding for the Disabled. (Summary taken from Riding for the Disabled Association Annual Journal, 1974). Town and Country Productions, Ltd., 21 Cheyne Row, London, SW3, 5HP, England.

The film describes how local volunteers, working closely with physiotherapists and the medical profession, select suitable ponies and set about the task of forming a new centre for the handicapped riders who may be spastic, polio patients, or girls and boys who are mentally disturbed, partially sighted or limbless or handicapped by accidents.

168. Riding Towards Freedom (16mm, color, sound, 35 minutes). Town and Country Productions, Ltd., 21 Cheyne Row, London, SW3, 5HP, England.

This film concentrates on the activities of the Riding for the Disabled Association (England). It presents background and difficulties of disablement as well as involvement of the medical profession and helpers. Scenes of preparing for a ride and a training conference are included.

Assistive Devices and Adapted Equipment

169. The Rein-Bar. (see Games, Sports and Exercises, pg 195).

The Rein-Bar for riders with disability of one arm is a 10-12" long, 1" in diameter bar which can be fashioned to fit between the reins at a suitable distance from the horse's mouth so that the rider can hold the middle of the bar with his unaffected hand and use wrist movement to steer the horse. The bar serves as a teaching device which can be eliminated once the rider has learned how to use his legs to do most of the guiding.

Additional Information

170. Virginia Mazzo, special educator and member of the Winslow Board of Directors, has developed a college course (3 credits) titled Horseback Riding in Special Education. Also a less intensive program for volunteer helpers is available. For information on either of these courses, contact the Winslow Riding for the Handicapped Foundation, RD 1, Box 369, Warwick, New York 10990.

Hunting and Riflery

Printed Material

171. Adams, R. C.; Daniel, A.; and Rullman, L. "Air Riflery." Games, Sports, and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 135-142.

Describes air riflery as an activity for physically impaired individuals. Among descriptions included are the Jaycee Shooting Education Program, equipment, safety, techniques, shooting positions, range procedures, assistive devices, suggested course outline, and program adjustments for specific disabilities.

172. Adams, R. C.; Daniel, A.; and Rullman, L. "Cross-Country Biathlon." Games, Sports, and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 181-184.

Wheelchair cross-country biathlon, developed from the cross-country skiing and rifle shooting seen in the 1968 Winter Olympics and was first introduced by Ron Adams of the Children's Rehabilitation Center (Charlottesville, Virginia). Description of the sport, equipment, techniques, rules, adaptive equipment and assistive devices, and program adjustments for specific disabilities are included.

173. Adams, R. C.; Daniel, A.; and Rullman, L. "Pistol Shooting." Games, Sports, and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 211-216.

Describes pistol shooting as an activity for physically impaired individuals. Includes descriptions of equipment, how to shoot, assistive devices, and program adjustments for specific disabilities.

174. Adams, R. C.; Daniel, A.; and Rullman, L. "Trap Shooting." Games, Sports, and Exercises for the Physically Handicapped. Second edition. Philadelphia: Lea and Febiger, 1975. pp. 235-240.

Describes trap shooting as an activity for physically impaired individuals. Includes descriptions of equipment, safety, how to shoot, assistive devices, and program adjustments for specific disabilities.

175. Adams, Ronald C. "Trap Shooting for the Physically Handicapped." Inter-Clinic Information Bulletin 8:6: 15-20; 1969.

176. *American Alliance for Health, Physical Education, and Recreation. Marksmanship for Young Shooters. Washington, D.C.: the Alliance, 1960. 23 pages. Illustrated. $1.00

Provides information on curriculum and program planning for teaching young shooters the use of the spring-type air rifle.

177. *American Alliance for Health, Physical Education, and Recreation. Shooting and Hunting. Washington, D. C.: the Alliance, 1960. 96 pages. Illustrated. $2.00.

The supplementary manual to Marksmanship for Young Shooters. Provides basic information on shooting and hunting skills.

178. "Cliffview." Challenge 3:2; November 1967.

Describes outdoor education/recreation area in Hamilton, Ohio, which provides a bicycle trail, riflery, and a hiking trail for handicapped individuals.

179. *The Conservation Department, Winchester-Western Division, Olin Corporation, East Alton, Illinois, 62024.

The Young Hunter
Principles of Game Management
Game, Gunners and Biology
A Law for Wildlife
The Elk
The Cottontail Rabbit
The White Tailed Deer
Gray and Fox Squirrels
The Ring Necked Pheasant
The Ruffed Grouse
The Mallard
Careers in Wildlife Conservation

180 Croucher, Norman. "Shooting." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High Street, W14,8NS), 1974. p. 49.

Discusses wildfowling, inland duck shooting, and conservation, as well as clay pigeon shooting as activity possibilities for disabled persons. Addresses for information sources in England also provided.

181 *Daisy Manufacturing Company. Daisey Hunter Education Instructor's Guide. Rogers, Arkansas: the Company (Box 220, 72756), 1972. 61 pages.

Provides complete teaching guidelines including: outlined and detailed lesson plans, objectives, illustrations, glossary of terms, and references for books, films, and charts useful for instruction in hunter education.

182. *Daisy Manufacturing Company. Daisey Shooting Education 10 Lesson Curriculum. Rogers, Arkansas: the Company (Box 220, 72756), 1973. 28 pages.

This instructor's manual includes detailed lessons, charts, and illustrations designed for the instruction of young shooters in the skills of proper gun handling and marksmanship. It also provides instruction in areas of gunology plus rules and procedures of air rifle competition.

183. *Daisy Manufacturing Company. Rifle Instruction Wall Charts. Rogers, Arkansas: the Company (Box 220, 72756), 1960. 50¢.

These charts show safety rules, gun parts, and a sight picture.

184. *Daisy Manufacturing Company. Shooting Education Programs for Camps, Schools, and Clubs. Rogers, Arkansas: the Company (Box 220, 72756), 1975. 12 pages.

This is a catalogue of shooting equipment, program kits, targets and accessories.

185. Gillette State Hospital. The Gillette State Hospital for Crippled Children Introduces the Daisy B.B. Gun Program. St. Paul, Minnesota: the Hospital (1003 East Ivy Street), n.d.

This introduction describes BB guns and how they are used in the Daisy BB Gun Program for the handicapped as given at the Gillette State Hospital, St. Paul, Minnesota. Included is practical information and illustrations about basic organization procedures, and purposes of the program, equipment, skills and techniques, positions for shooting and possible adaptations of the positions for various handicapping conditions.

186. Hancock, Frank: "Wheelchair Hunters Trying Their Luck Too!" The World News (Roanoke, Virginia), Tuesday, November 18, 1975. 2 pages.

Describes special wheelchair hunting outings organized by Bob Miller, assistant director of the Easter Seal Society for Crippled Children (Roanoke, Virginia).

187. Harper, Jack. "Guts, Grit, and Guns." Guns and Ammo 14:5: 38-39,69; May 1970.

Discusses the rehabilitation programs that have shooting therapy: Gillette State Hospital (St. Paul, Minnesota) and the University of Virginia's Children's Rehabilitation Center (Charlottesville). Aspects of each program are described, including adaptive equipment used.

188. Hile, Warren. Adventures in Camping for the Trainable Mentally Handicapped. Augusta, Michigan: the Program (Fort Custer State Home), 1970. 3 pages.

(For abstract, see Hiking and Nature Trails.)

189. Lincoln School Camping Program. Town and Country, Missouri: Special School District of St. Louis County (12110 Clayton Road, 63137), n.d. 6 pages.

(For abstract, see Aquatics.)

190. Lloyds, A. D. "The Blind in an Age of Science: Sports and Hobbies for the Blind." New Beacon 53:631: 287-290; November 1969.

(For abstract, see Aquatics.)

191. Rollins, Tom. "Dusty Plays for Keeps." Green Pages 1:1: 8; Fall 1975.

Describes the difficulties encountered by Dusty Houk, an amputee, who wished to re-pursue his hobby of hunting. Lack of balance and lack of ability to pivot quickly were handicaps which he overcame by installing a swivel seat from his boat on a box in the field he hunted.

192. *Van der Smissen, Betty, and Goering, Oswald H. "Firearms Safety and Hunting." A Leader's Guide to Nature-Oriented Activities. Ames, Iowa: The Iowa State University Press, 1974. pp. 178-179.

Includes information and suggestions on instructional programs, useful knowledge in hunting, clubs and competitive activities, and special activities related to hunting.

Audio Visual Material

193. Not Just a Spectator (16mm, sound, color, 36 minutes). Town and Country Productions, 21 Cheyne Row, Chelsea, London, SW3,5HP. Available in United States from Instructional Rehabilitation Film Library, 20 West 40th Street, New York, New York, 10018.

(For abstract, see Aquatics film list.)

Assistive Devices and Adapted Equipment

194. Lap Board.

This simply is a board which provides a firm rest for elbows or pistol machine rest for shooters who are confined to a bed or wheelchair. For more information see Games, Sports, and Exercises for the Physically Handicapped, Second Edition, page 24.

195. Trap Suspension System

This device may be used with physically impaired persons who have upper extremity weakness and joint involvement to allow them to participate in the activity of trap shooting. A description of how to make this device is provided in Games, Sports, and Exercises for the Physically Handicapped, Second Edition, page 237.

196. Tripod Gun Holder.

This device supports the weight of the rifle and is a guide for aiming. It is used to assist physically impaired shooters with upper-limb involvement to participate in air riflery. For more information and instructions for making this device see: Games, Sports, and Exercises for the Physically Handicapped, Second Edition, page 138.

197. Pistol Machine Rest.

This is a portable machine which may be mounted on a lapboard of a wheelchair and is designed to allow persons with severe physical impairment to participate by either pulling back on the moveable trigger bar with his hand or by pulling a mouthpiece device attached to the trigger bar. A description of how to make this device is provided in Games, Sports, and Exercises for the Physically Handicapped, Second Edition, pages 214-215.

198. Wrist Stabilizer.

This is composed of wrist straps and a U-shaped channel of metal which supports the pistol muzzle along the back of the shooter's left wrist. For more information see Games, Sports, and Exercises for the Physically Handicapped, pages 214-215.

Mountaineering, Orienteering, Outward Bound, and Trip, Survival and Wilderness Camping

Printed Material

199. Anderson, Roger J. Canoeing and Wilderness Camping with Teenage Institutionalized Educable Mentally Retarded Boys. Special project. Mankato, Minnesota: Mankato State College, 1964. Article, "Canoeing and Wilderness Camping." The Best of Challenge. Washington, D. C.: American Alliance for Health, Physical Education, and Recreation, 1971. pp. 112-113.

Staff at Mankato State School introduced canoeing and wilderness camping as a part of their program for increasing life experience situations. Four EMR boys were chosen for the trip. Presented is information about preparations for the trip which included 6 training and orientation sessions, and experiences of the trip itself. Also included were conclusions drawn from general observations, noted accomplishments and deficiencies of the program, and recommendations for future trips.

200. *Angier, Bradford. Free for the Eating. Harrisburg, Pennsylvania: Stackpole Books (Cameron and Kelker Streets, 17105).

A nature study cookbook showing how to find and fix 100 wild plants. 300 recipes are provided.

201. *Angier, Bradford. Living Off the Country. Harrisburg, Pennsylvania: Stackpole Books (Cameron and Kelker Streets, 17105), n.d.

Describes ways to provide necessities when ready-mades are missing. Classic survival tips such as finding and eating natural foods; improvised shelters, fishing tackle, and weapons; and conserving clothes, footwear, and strength are included.

202. Adams, W.D. Survival Training: Its Effects on Self-Concept and Selected Personality Factors of Emotionally Disturbed Adolescents. Unpublished Doctoral dissertation. Logan, Utah: Utah State University, 1969.

203. Barcus, Carolyn G., and Bergson, Roland G. "Survival Training and Mental Health--A Review." Therapeutic Recreation Journal 6:1: 3-7; 1972.

Discusses outward bound survival training program in Colorado. Focuses on purposes, subjective values, and systematic evaluation of survival training.

204. Berube, Pierre. "Survival Camping and Therapeutic Modality," Leisurability 2:1: 14-20; January 1975.

Discusses the use of survival camping as an approach for helping behaviorally, emotionally, and mentally disturbed individuals achieve greater levels of compentence and thus better self-concepts. Main components of the camp lead by Berube, which was aimed toward introducing this approach, are described along with an outcome assessment.

205. "Blind Students Conquer Mt. Kilimanjaro." Ebony 24: 44-46; June 1969.

206. Camp Confidence. Wilderness Camping. Brainerd, Minnesota: the Camp (Box 349, 56407), n.d. 10 pages.

Information on wilderness camping including planning, equipment list, setting up and breaking camp, and mosquite protection is provided. Also includes an example of a typical daily program and descriptions of various camp craft projects.

207 "Chief Blue Sky--Ever Mindful of a Camper's Potential." Washington Missourian, Wednesday, July 23, 1975.

Camp program led by Mrs. Liz Gilbert includes such activities as mini-mountain rappeling, wilderness camping, a 24-hour outpost trip, and canoeing.

208. Collingwood, Thomas R. Survival Camping: A Therapeutic Mode for Rehabilitating Problem Youth. Hot Springs, Arkansas: Rehabilitation Research and Training Center, n.d. 54 pages.

This report provides specific details on development and implementation of the experimental camp program called "Camp Challenge," a rugged three-week survival camping program designed to capitalize upon the therapeutic potentials of the camping process and serve as a functional program for the rehabilitation of problem youth. Consequent effects on the participants and conclusions drawn suggest that survival camping can be an effective approach to help rehabilitate problem youth by developing more positive behaviors and attitudes through a structured program stressing self-sufficiency.

209. Collingwood, Thomas. "Survival Camping with Problem Youth." Rehabilitation Record, May/June 1972. pp. 22-25.

Describes "Operation Survival," a three-week experimental survival camping program and its positive effects on 21 teenage, delinquent boys.

210. Conrad, Susan G. "Overnight Camping Highlights Day Camp." ICRH Newsletter 3:6: 1,3; 1968.

Two overnight primitive camping sessions were included in a day camp program for 40 mentally retarded and physically disabled children (including severely mentally retarded, emotionally disturbed, blind, and deaf). Program activities included living out-of-doors, arts and crafts, and daily work tasks.

211. Croucher, Norman. "Hill Walking, Scrambling, Rock Climbing, Mountaineering." Out Pursuits for Disabled People. London, England: Disabled Living Foundation (246 Kinsington High Street, W14,8NS), 1974. pp. 33-37.

Activities hill walking, scrambling, rock climbing, mountaineering are described. Examples of disabled participants and special organizations for this type of recreation are provided. Information resources from the Great Britain area also included.

212. Croucher, Norman. "Orienteering." Outdoor Pursuits for Disabled People. London, England: Disabled Living Foundation (346 Kinsington High Street, W14,8NS), 1974. p. 45.

Provides brief description of orienteering as a recreational activities for disabled people. Resource contacts from Great Britain included.

213. *Dalrymple, Byron. Survival in the Outdoors. Outdoor Life; Dutton, 1972. p. 309.

Provides practical information on finding food and shelter in the wilderness as well as handling different kinds of emergencies.

214. The Effects of a Modified Outward Bound Program on the Self-Concept of Emotionally Disturbed Adolescent Patients. Master's thesis. University Park, Pennsylvania: Pennsylvania State University (College of Health, Physical Education, and Recreation), November 1975.

215. Etzwiler, Donnell D., et.al. "Wilderness Camping for the Diabetic." Diabeties 14:10: 676-681; 1965.

Groups of juvenile diabetics have ventured into the boundary waters canoe area in northern Minnesota. Accompanied by a trail guide and physician, these young men have learned to live with the diabeties under extreme circumstances. Their camping and medical supplies are discussed, as well as their dietary management.

216. Fact Sheet--Camping Programs. San Francisco, California: Recreation Center for the Handicapped, 1972.

Philosophy, aims, objectives and a daily schedule for the day camping program conducted at the Recreation Center for the Handicapped (San Francisco, California) are presented. Philosophy, goals, program planning, and activities for trip camping are also included in this fact sheet. General aims and objectives of residential camping, program implementation, and activities for different groups of impaired, disabled, and handicapped children, youth, and adults are discussed.

217. Farmer, Kathleen. "Mountains Move." Camping Journal, November 1973. pp. 29-32.

218. Garlie, Norman W., and Hoxworth, David. "Mountaineering as a Rehabilitative Training Experience for Selected Adolescents." Journal of Rehabilitation 36:3: 38-39; 1970.

The National Outdoor Leadership School provided a rugged outdoor adventure experience in mountaineering to selected emotionally disturbed patients of Wyoming State Hospital. The School was developed to train leaders in the art of mountaineering and to develop a philosophy embodying a sense of responsibility in and for the outdoors.

219. Grosse, Susan J. Broadening Educational Experiences through Outdoor Education. Milwaukee, Wisconsin: The F. J. Gaenslen School (1301 East Auer Avenue, 53212), n.d. 4 pages.

(For abstract, see Aquatics.)

220. Hile, Warren. Adventures in Camping for the Trainable Mentally Handicapped. Augusta, Michigan: the Program (Fort Custer State Home), 1970. 3 pages.

(For abstract, see Hiking and Nature Trails.)

221. Hobbs, Tom R., and Shelton, George C. "Therapeutic Camping for Emotionally Disturbed Adolescents." Hospital and Community Psychiatry 23:10: 298-301; 1973.

Describes benefits which were received in an outpatient program--a five-day camping canoe trip undertaken by two counselors and nine emotionally disturbed adolescent boys.

222. Jersted, Lute, and Stelzer, John. "Adventure Experiences as Treatment for Residential Mental Patients." Therapeutic Recreation Journal 7:3: 8-11; 1973.

Describes the adventure model in treatment program at the Oregon State Mental Hospital which involves cooperative participation of the mental patients, professional staff, and guides in three basic adventure activities: rock climbing, white-water boating, and survival/ecology hiking.

223. Jesson, Larry. "Outward Bound for the Handicapped." Journal of Health, Physical Education, and Recreation 47; 1976 (In Press). Copies of original paper available in xerox form from IRUC (1201 16th Street, N. W., Washington, D. C., 20036). 3 pages.

Larry Jesson describes his personal experiences with the Northwest Outward Bound School located in Eugene, Oregon. He, himself a paraplegic from birth who uses crutches, and four other physically handicapped adults (3 of whom were moderately affected with cerebral palsy, and one who was totally blind and had epilepsy) were involved in a pilot Outward Bound course which consisted of a rugged seven-day course at Smith Rocks State Park in Central Oregon. As few modifications as possible were made with this course so that the difficulty of the challenge made the achievement of the participants an even greater personal reward. Activities included camping, back packing, rock climbing, and rappelling.

224. Jones, Robert H. "An Alternative to the Ward: Wilderness Camping." Journal of Physical Education and Recreation 46:5: 33-34; May 1975.

Administered Tennessee Self-Concept Scale before and after a 13-day camping experience found that wilderness camping did enhance personal acceptance and satisfaction of schizophrenic adolescents.

225. Kelley, F., and Baer, D. Outward Bound Schools as an Alternative to Institutionalization for Adolescent Delinquent Boys. Boston, Massachusetts: Fondel Press, 1968.

226. *Kjellstrom, Bjorn. Be Expert with Map and Compass. Harrisburg, Pennsylvania: Stackpole Books (Cameron and Kelker Streets, 17105), n.d.

Provides short course in using map and compass; facts and techniques; and a kit containing training compass, practice protractor, and a color fold-out topographic map. Games, projects, quizzes for self teaching or group are also included.

227. Kole, Delbert M., and Busse, Howard. "Trail Camping for Delinquents." Hospital and Community Psychiatry 20:5: 150-153; 1969.

228. Loughmiller, Campbell. Wilderness Road. Hogg Foundation for Mental Health, 1965.

229. Malloy, June R. "Survival Program for EMR, An Outdoor Education Technique." ERIC-Cress Newsletter 6: 1-2; Summer 1971.

230. Mealey, Mike. "The Climbing Admiral, Too Old for the War." Physician and Sports Medicine 2:10: 95; October 1974.

Describes a 91-year old man who climbed Mt. Fuji.

231. *Merrill, W. K. Getting Out of Outdoor Trouble. Harrisburg, Pennsylvania: Stackpole Books (Cameron and Kelker Streets, 17105), n.d.

Provides information on handling outdoor emergencies such as being lost, cold, hungry, wet, and hurt.

232. O'Donnell, James. "Snow Trek." Parks and Recreation 8:4: 50-51; 1973.

Describes problems and accomplishments encountered with emotionally disturbed teenagers on a one-week hike in sub-zero temperatures in the Idaho Mountains.

233. "Operation Challenge." The Best of Challenge Volume II. Washington, D. C.: American Alliance for Health, Physical Education, and Recreation; 1974. pp. 79-80.

Green Berets conducted four four-day outdoor training programs for 88 mentally retarded youngsters. Activities of these programs were similar to those of actual Green Beret training which included instruction for survival, outdoor cooking, making shelters, navigating, hiking, making rope bridges, and rappelling.

234. Pomeroy, Janet. "Organized Camping in America: Trip Camping - A New Concept for the Physically Handicapped." Recreation in Treatment Centers 11: 36-38; September 1963.

235. Price, J. "Adolescents/Youth." American Journal of Orthopsychiatry 41:2: 293,306; 1971.

236. Shank, John. "Therapeutic Recreation Through Contrived Stress." Therapeutic Recreation Journal 9:1: 21-25; First Quarter 1975.

Describes the principles behind Outward Bound type experiences, which put individuals in situations markedly different from their normal life situations and demand that they push themselves further than they believed possible. Values of such a program for psychiatric patients at McLean Hospital (Belmont, Massachusetts) are discussed with case studies. The McLean program is called project INSITE (In Nature, Self-Improvement Through Effort).

237. Thorstenson, C. T., and Heaps, R. A. "Outdoor Survival and Its Implications for Rehabilitation." Therapeutic Recreation Journal 7:1: 31-33; 1973.

Reviews research which has produced results indicating outdoor survival has promising possibilities as a method of rehabilitation and preventative mental health work. Test this by using a larger sample (32 male and 50 female students) then was previously used. Hypothesizes that a similar study of self-concept changes would be supportive of the inherent value of outdoor survival training. The self-evaluation made by each of the students and compiled as a group revealed a positive change in the overall level of self-esteem.

238. Trip Camp Report: 1964. San Francisco, California: Recreation Center for the Handicapped (207 Skyline Boulevard, 94132), 1964.

Complete account of the Trip Camp Program that occurred in 1964 is provided. Includes a description of the history of trip camping ideas for planning and organization, a schedule of events, evaluation of group participating, menus, transportation, finance and budget.

239. *Van der Smissen, Betty, and Goering, Oswald H. "Orienteering." A Leader's Guide to Nature-Oriented Activities. Ames, Iowa: the Iowa State University Press, 1974. pp. 184-187.

A description of orienteering as a sport, use of maps and compass, orienteering hikes, project orienteering, orienteering races, and wilderness orienteering are all included. List of references on page 189.

240. Williams, Alvida. "Hey! Let's Have the Boys Climb Hooknose!" Challenge 7:1: 1-2; September-October 1971.

Special boy scout troop consisting of mildly retarded adults, residents of Lakeland Village State Residential School for the Mentally Retarded (Medical Lake, Washington), made mountain climbing one of their recreational activities. They combined camping skills along with their climb to the peak of Hooknose, 7,305 feet above sea level.

241. Wilson, John. "The Blind Climbers of Kilimanjaro." The Seer, September 1970.

Tells of 7 blind climbers conquering Mt. Kilimanjaro.

242. Woolsey, Nethella. "Course in Survival Helps." Salt Lake Tribune, Sunday, February 14, 1971.

Audio Visual Material

243. Not Just a Spectator (16mm, sound, color, 36 minutes). Town and Country Productions, 21 Cheyne Row, Chelsea, London, SW3,5HP. Available in United States from Instructional Rehabilitation Film Library, 20 West 40th Street, New York, New York 10018.

(For abstract, see Aquatics film list.)

RESOURCE CONTACTS

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing/Winter Games Act.	Survival/Wilderness/Trip. Camping	Mountain Climbing/Rappelling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
Ron Adams University of Virginia Children's Rehabilitation Center Route 250 West Charlottesville, Virginia 22903	x	x								x								x	x	x	
Acorn Hill, Inc. 10 South 135 Book Road Naperville, Illinois 60540																					x
Tenely Albright Deaconess Medical Building 110 Francis Street Boston, Massachusetts 02215										x											
Amateur Bicycle League of America 6411 Orchard Street Dearborn, Michigan 48126																	x				
American Blind Skiing Foundation 610 South William Street Mount Prospect, Illinois 60056									x												
American Casting Association P. O. Box 51 Nashville, Tennessee																			x		
American Hearing Impaired Hockey Association Stan Mikito's Hockey School Mount Prospect, Illinois												x									
American Youth Hostels 20 West 17th Street New York, New York 10011																	x				
Evan Armstrong Falls Activity Center P. O. Box 244 Thief River Falls, Minnesota 56701										x											
Frony Balderama Northern California Ski Club of the Deaf 3447 25th Street San Francisco, California 94110									x												

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
Joseph J. Bauer 55 Mortimer Avenue Toronto 6, Ontario, Canada																					x
Belchertown State School Recreation Department Belchertown, Massachusetts 01007																					x
Bicycle Institute of America 122 East 42nd Street New York, New York 10017																	x				
Bicycle Magazine 235 Montgomery Street San Francisco, California 94104																	x				
Bicycle Manufacturer's Association of America, Inc. 1101 Fifteenth Street, N. W. Washington, D. C. 20005																	x				
BOLD (Blind Outdoor Leisure Development) Box 3204 Aspen, Colorado 81611					x				x												
Kristy Bott Discover Thru Outdoor Education 44001 Garfield Road Mt. Clemens, Michigan 48043													x	x		x		x	x		
Gregory Bond 3862 Uris Court Irvine, California 92705				x																	
Borderland Farm, Inc. RD 1, Box 369 Warwick, New York 10990																					x
Steve Brannan Department of Special Education Smith Memorial Center Portland, Oregon 97207														x		x		x	x		
Octavia Brown Somerset Hills Handicapped Riders Club, Inc. Crossroads Farm Larger Cross Bedminster, New Jersey																					x

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappelling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
Jim Brunotte, President Rancho Kumbya Highway 58 Creston, California 93432																					x
James Bush Michigan Ski Club of the Deaf 15851 Stephens Drive East Detroit, Michigan 48021									x												
Camp Challenge Easter Seal Society of Florida 231 East Colonial Drive Orlando, Florida 32801	x																	x	x		
Camp Holiday Trails R.F.D. 1, Box 356 Charlottesville, Virginia 22901																					x
Canadian National Institute for the Blind 1929 Bayview Avenue Toronto, Ontario, M4G 3E8, Canada							x									x					
Canadian Ski Instructors Alliance 350-3300 Cavendish Boulevard Montreal, P.Q., H4B 2M8, Canada									x												
Simon J. Carmel, President The U. S. Deaf Skier Association 10500 Rockville Pike, Apt. 405 Rockville, Maryland 20852									x												
Janice Claussen, R.T. Polk County Association for Retarded Children and Adults 431 S. W. Eighth Street Des Moines, Iowa 50309										x											
Daisy Division Victor Comptometer Corp. Training Services Box 220 Rogers, Arkansas 72756																				x	
Disabled Ski[illegible] Association of British Columbia ([illegible] BC) Box 3433, Ma[illegible] P.O. Vancouver, British Columbia, Canada									x												

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
Mark Dubois or Rick Spittler P. O. Box 131 Vallecito, California 95251					x																
Dick Endres Camp Confidence Box 349 Brainerd, Minnesota 56401	x	x				x		x	x	x	x		x	x				x	x		
Donald Fields New Jersey Skiers Club of the Deaf 159 Davis Avenue Hackensack, New Jersey 07601									x												
Friends for Bikecology 1035 East De La Guerra Street Santa Barbara, California 93103																	x				
Genesee County Committee for Riding for the Handicapped c/o Cooperative Extension Service 4-H Youth Programs 175 South Amboy East Lansing, Michigan 48824																					x
Elizabeth Gilbert St. Louis Association for Retarded Children 6372 Clayton Road St. Louis, Missouri 63117	x	x			x										x	x		x	x	x	
Eleanora Gordon Ken Crest Centers for Exceptional Persons Route 29 Mont Clare, Pennsylvania 19453																					x
Susan J. Grosse F.J. Gaenslen School 1301 East Auer Avenue Milwaukee, Wisconsin 53212	x	x						x										x	x		
Glen A. Gruber Paul A. Dever State School Taunton, Massachusetts 02780																					
Philip E. Gutfran Connecticut Ski Club of the Deaf 2 Sunset Hill Road Simsbury, Connecticut 06070									x												

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
Steven Hansen Eastern Idaho Child Development Center Therapeutic Recreation Services 2475 Leslie Avenue Idaho Falls, Idaho 83401	x	x			x				x		x	x	x	x	x	x		x	x		
Harmon Harris 3007 Kennester Drive Lemon Grove, California 92045																	x				
Dan Hattenburg, Recreation Department Lakeland Village P. O. Box 200 Medical Lake, Washington 99022							x							x	x	x		x			
Humane Society of the United States Box 98 East Haddam, Connecticut 06423																					x
Ice Skating Institute of America P. O. Box 955 Ft. Myers, Florida 33902										x											
Lute Jerstad Jerstad Adventures Oregon State Mental Hospital Portland, Oregon						x								x	x			x			
Larry Jesson c/o Larry Neal University of Oregon 1587 Agate Street Eugene, Oregon 97403																x					
Joseph P. Kennedy, Jr. Foundation 1701 K Street, N. W. Washington, D. C. 20006										x											
Pat Karman Firecrest School 15230 15th Street, N. E. Seattle, Washington 98155							x														
Keith Kingbay Cycling Activities Manager Schwinn Bicycle Company 1856 North Kostner Avenue Chicago, Illinois 60639																	x				

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Toboganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
John Knorr University of Wisconsin 602 State Street Madison, Wisconsin																		x			
Robert A. Kothencz, Tour Director Ultimate Ski Tours, Inc. 705 East 80th Street Brooklyn, New York 11236		x	x			x			x												
Patricia Krohn Denver Ski Club of the Deaf 4743 West 10th Avenue Denver, Colorado 80204									x												
Art Kruger World Games for the Deaf 7530 Hampton Avenue, #303 Hollywood, California 90046									x	x											
Lapeer County Committee for Riding for the Handicapped c/o Cooperative Extension Service 4-H Youth Programs 175 South Amboy East Lansing, Michigan 48824																					x
League of American Wheelmen 5118 West Foster Avenue Chicago, Illinois 60630																	x				
Julie Lewis, Instruction Director Disabled Skiers Association of British Columbia 2228 Kings Avenue West Vancouver, British Columbia, Canada									x												x
Willard Little Kankakee State Hospital Kankakee, Illinois 60901																	x				
Naomi Lorch 108 La Rue Drive Huntington, New York 11743																					x
Loudoun 4-H Clubs Riding for the Handicapped Foundation P. O. Box 100 Ashburn, Virginia 22011																					x

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Toboganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horsetack Riding
Love Way Projects, Inc. R.R. 3, Box 120B Middlebury, Indiana 46540																					x
Oscar Marcus New York Metro Ski Club of the Deaf 714 Gravesend Neck Road Brooklyn, New York 11223									x												
Mary F. Maroney 57 Fernwood Road Summit, New Jersey 07901										x											
Jean McCally Columbia Horse Center Columbia, Maryland 21044																					x
Lida L. McGowan Cheff Center for the Handicapped Box 171 Augusta, Michigan 49012																					x
Dick McLaughlin Minnesota Deaf Ski Club 1080 Como Place St. Paul, Minnesota 55103									x												
Meadow Brook Farm R.F.D. 5, Box 349 Coventry, Connecticut 06238																				x	x
Duane G. Messner The Children's Hospital 1056 East 19th Avenue Denver, Colorado 80218									x												
Midland Riding Center Route 1 Midland, Georgia 31820																					x
Lee Anna and Rolf Mielzarek Mountain Falls Route Winchester, Virginia 22601	x	x			x			x						x				x	x	x	x
Oral O. Miller 3701 Connecticut Avenue, N. W. Washington, D. C.								x	x												

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
Robert L. Miller Easter Seal Camp 4841 Williamson Road, P.O. Box 5496 Roanoke, Virginia 24012	x	x																x		x	x
Isadore Miron 2219 Ola Lane No: 5 Fort Worth, Texas 76111																	x				
Mississauga Remedial Riding Association 69 Prennan Avenue Islington, Ontario, Canada																					x
Max Morton Colorado State University Ft. Collins, Colorado						x															
Laurie Mueller Recreation Services 6372 Clayton Avenue St. Louis, Missouri 63117	x	x			x									x	x	x		x	x	x	
National Rifle Association of America 1600 Rhode Island Avenue, N. W. Washington, D. C. 20036																				x	
National Safety Council 425 North Michigan Avenue Chicago, Illinois 60611																	x				
Hal O'Leary Supervisor, Amputee Teaching Winter Park Ski School Winter Park, Colorado 80482									x												
Kurt Oppelt P. O. Box 13 State College, Pennsylvania 16801										x											
Paumanok Riding Academy for the Handicapped 19 Connecticut Avenue Long Beach, New York 11561.																					x
James Peller, Rec. Therapist Pacific State Hospital 3250 Valley Boulevard Pomona, California 91766																	x				

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wildermess Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trail	Fishing	Hunting/Riflery	Horseback Riding
Janet Pomeroy Recreation Center for the Handicapped 207 Skyline Boulevard San Francisco, California 94132	x	x						x			x			x				x	x	x	
Pony Riding for the Disabled Association 160 Tristania Road Kenmore, Brisbane, Qld4069, Australia																					x
Jim Raymonjack Lester B. Foreman Area Education Center Fairport, New York																			x		x
Jeana Ridgeway Fletcher Miller School 200 Kipling Lakewood, Colorado 80215									x												
The Riding Centre Association 1117 East Hyde Road Yellow Springs, Ohio 45387																					x
Riding for the Disabled Association National Equestrian Center Kenilworth, Warwickshire, CU8 2LR, England																					x
The Riding School for the Handicapped, Inc. 799 Nutt Road Spring Valley, Ohio 45370																					x
Rock Creek Park Horse Center Military and Glover Roads, N. W. Washington, D. C.																					x
St, Andrews Presbyterian College Laurinburg, North Carolina 28352																					x
Norton Sanders 701 West Gate University City, Missouri 63130																			x		
Nola Sinclair Riverview School Manitowac, Wisconsin									x												
Erling Stordahl, Director Beitostolen Helsesportseter 2953 Beitostolen TLF Norway								x	x	x	x		x	x	x	x		x	x	x	x

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Riflery	Horseback Riding
Matthew Sullivan Special School District, St. Louis County 12110 Clayton Road Town and Country, Missouri 63131	x	x														x		x	x	x	x
William Teel Southern California Ski Club of the Deaf 18013 Devonshire, Apt. 134 Northridge, California 91324									x												
Aveleigh A. Tideman Carleigh Farm Philippi, West Virginia 26416																					x
Maudie Hunter Warfel National Foundation for Happy Horsemanship for the Handicapped Box 462 Malvern, Pennsylvania 19355																					x
Charles Warthling Pocono Ski Club of the Deaf 785 Hudson Street Hawley, Pennsylvania 18428									x												
Wayne DuPage Hunt Pony Club Therapeutic Riding Program Box 206 Wayne, Illinois 60184																					x
Will-a-Way Recreation Area Fort Yargo State Park Winder, Georgia 30680	x	x						x										x	x		
Willy Shaeffer Ski School Arapahoe Basin, Colorado									x												
Windsor Association of Riding for the Handicapped 1226 Gullette Avenue Windsor, Ontario, Canada																					x
Windrush Farm, Inc. Brookview Road Boxford, Massachusetts 01921																					x

	Boating	Canoeing	Sailing	Surfing	White Water Rafting	Scuba/Skin Diving	Water Skiing	Rowing	Skiing	Ice Skating	Sledding/Tobogganing	Hockey	Snow Shoeing	Survival/Wilderness Trip Camping	Mountain Climbing/Rappeling	Outward Bound	Bicycling	Hiking/Nature Trails	Fishing	Hunting/Rifflery	Horseback Riding
Winslow Riding for the Handicapped Foundation, Inc. R.D. 1, Box 369 Warwick, New York 10990																					x
Jim Winthers, Secretary National Inconvenienced Sportsmen's Association 3738 Walnut Avenue Carmichale, California 95608									x												
Woodlane Riding School and Day Camp Company, Inc. Fenimore Road, R.D. 2 Box 2384 Mount Holly, New Jersey 08060																					x

SMALL CRAFT SAFETY

A VALUABLE ADDITION TO YOUR SWIMMING PROGRAM

ACROSS the country there is an increasing demand to develop swimming programs for handicapped children. Because of this, overall levels of swimming ability of handicapped children are being raised and their potential to participate in other aquatic activities is increasing. During the winter months possibilities for broadening the scope of participation in water sports is somewhat limited by climate. However, during the warm summer months increasing numbers of these children travel, go camping with their parents, attend residential camps, camp as part of school programs, and participate in recreation programs. Swimming is available, and also many other water activities, one of the most prevalent being small craft. Because of this increased potential for small craft activity we have found it advantageous to include it as part of our winter swimming program so that when the children have opportunities for these activities they will be ready to participate with utmost safety.

All students who participate in the regular instructional swimming program are included in small craft activity regardless of swimming ability or degree of handicap. Children with cerebral palsy, perthes disease, spina bifida, muscular dystrophy, dwarfism, marfans syndrome, and mental retardation all participate; degrees of conditions include minimal impairment of one limb to quadriplegia, and above average intelligence to mental retardation; ages from 6 to 20. Swimming ability ranges from beginner through advanced.

Approximately three half-hour class periods are spent on small craft safety. The same material is presented to all levels of swimmers with only minor variations as unusual situations or specific questions arise. Objectives for students are—

- To learn the purpose of a life jacket and how to wear one.
- To learn how to get in and out of a boat safely according to each student's individual ability.
- To learn the safe way to behave while a passenger in a boat.
- To learn the consequences of unsafe behavior.
- To learn what to do in case of a capsize.
- To become capable of being safe passengers in any boat in which one might ride.

The first two lessons are spent on use of the life jacket. At the first lesson each student is shown how to put on a life jacket and given a brief explanation about purposes of a life jacket. Each student tries his out to see if it keeps him afloat. In some cases, students do not have sufficient confidence to do a back float and get their feet off the bottom to see how the jacket works. These nonswimmers are taken one at a time by the instructor into deep water; they are towed on their backs to get the feel of the jacket actually supporting them. Once in deep water they are allowed to float unsupported as final *proof* that the jacket does work.

DURING the second lesson students put on jackets by themselves and are helped only if they absolutely have forgotten how the jacket works. Then they get into the water and repeat the floating of the previous lesson until they feel they can really trust the jacket to keep afloat. Again some nonswimmers may need to be taken to where their feet do not touch bottom. Students are asked to fall into deep water to simulate the action of falling overboard from a boat. This gives them added confidence in the life jacket and prepares them for the next lesson.

A fiberglass dinghy on loan from the local chapter of the American Red Cross is used for the third lesson. As children come into class they are asked to put on a life jacket and sit on the deck. The lesson begins with an explanation and demonstration of how to get into a boat properly, emphasizing—

- Hold boat steady and close to the dock.
- Keep weight as low as possible.
- Transfer weight into the middle of the boat over the keel.

MOST of our students are unable to enter a boat by stepping in—they need to have the boat held steady while they enter feet first from a sitting position on the deck much as one would transfer from a wheelchair to another surface. Once they are in the boat they are reminded to sit quietly in the middle of the boat. In most cases three students—one on each seat—are taken at the same time. Two students always hold the boat while a third gets into it. In

the few cases where four are taken at the same time, two students sit on the middle seat and face opposite directions so they will not land on each other when capsized.

As the boat is towed away from the side by instructors in the water it is rocked and students asked what they think would happen if they stood up or did a lot of moving around. Most children feel it would be quite unsafe because the boat might tip over. Before the boat is capsized, students are asked if there is anything they should remember to do when the boat goes over—they enthusiastically answer, "Hang onto the boat because it provides good floating support!"

Once the boat is away from the side it is capsized by an instructor who pushes a gunwale under the water amidships. As the boat goes under it tips toward the instructor who catches the far gunwale so it does not come all the way over onto students before they get clear. As the boat capsizes some children are able to hang on. Those who cannot are reminded to get back to the boat as quickly as possible. With students on either side of the boat balancing it right side up, they are instructed to float or swim over the side on their stomachs and sit in the middle and on the bottom of the boat with legs

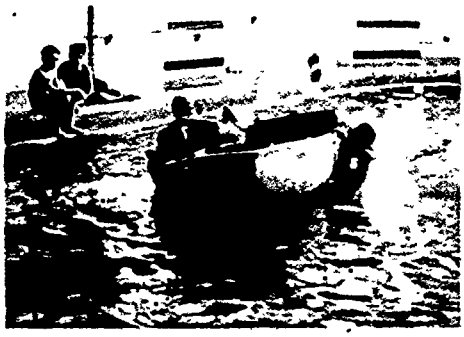
SUSAN J. GROSSE
F. J. Gaenslen School
1301 East Auer Avenue, Milwaukee, Wisconsin 53212

PHOTOS, from left:

The manner of entering the boat depends on the disability. Emphasis is on holding craft steady and keeping weight low.

Swamping helps students learn what to do in an emergency.

Staying with the boat and using it to get to safety are essential when swamped.



spread to balance the boat for the next person to climb aboard. When all are on board again the boat is hand paddled to shore.

THE boat may roll all the way over while students are trying to get into it. In this case students can be shown how to use the boat as a float in the upside down position. Two students on opposite sides amidships crawl up the sides until they can reach each other. They grasp wrists and can take turns holding on to each other in this way for hours. To right the boat again all students go on the same side and crawl over it; as they crawl the boat turns toward them right side up. This method may sound a bit strange compared to standard procedures; however, our boat is quite heavy and our students real light weights, so this method works quite well.

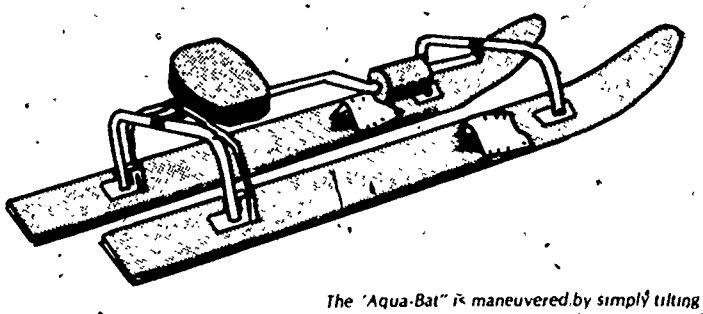
It is possible the boat may tip all the way over when capsized and trap a student underneath. It only takes a few seconds to tip the boat back; to keep him and others from being afraid if this happens, we tip the boat over on purpose and take students one at a time under it to show the air pocket *cave* under the boat where they breathe if ever caught there. Students are carried under the boat by instructors; do not allow students to swim under the boat unassisted unless they are skilled swimmers and used to swimming underwater.

After each group of students has a turn, the boat is emptied by tipping it almost upside down—not all the way because a vacuum is created making it impossible to lift; lift the bow first onto and perpendicular with the pool deck. The boat is then slid so a majority of its weight is over the deck; then the deck is used as a fulcrum to lift the stern out of the water. The boat is rolled over on the deck and lifted stern first back into the water. It takes at least two people to handle a fiberglass dinghy both in and out of the water for a unit such as this. Even though a canoe is lighter and can be handled by one person, we did not consider it suitable for this type student because of its size, weight, construction, and general behavior.

Reprinted from Challenge (May/June 1972)

Waterskiing !

By Pat Karman
Aquatics Director Fircrest School Seattle, Washington



The 'Aqua-Bat" is maneuvered by simply tilting the seat which mechanically turns the skis Frame is 16 gauge 1" diameter steel tubing with baked enamel finish inside and out Hinged joints have neoprene bearings Seat is vinyl covered deep foam cushion Overall size is 31"x69"x15" high It weighs 29 pounds and floats Special 72' tow rope with 12" bar, float, hitch ring and bridle is included

Available from Gander Mountain, Inc , Outdoor Sportsman s Suppliers, P O Box 248 Wilmot, Wisconsin 53192 for $104 50

This is not an endorsement or guarantee, implied or otherwise, on the safety, construction, or quality of the "Aqua-Bat' nor a recommendation of Gander Mountain, Inc by Sports 'n Spokes Magazine

Waterskiing for paraplegics and quadriplegics?? You bet! Some of us in the Seattle area discovered the "how to" on a camping-canoeing outing for the physically disabled.

Canoeing and primitive camping were to be the highlights of the trip which was sponsored by the King County Park Department, a leader in wheelchair sports and recreation programs The canoeing and camping were indeed an adventure, but waterskiing turned out to be the highlight Quite by accident we discovered that another party on the lake had a waterskiing apparatus called an "AQUA-BAT" that looked suitable for waterskiing by paras

The "AQUA-BAT consists of two regular waterskis spaced about two feet apart and connected by heavy tubing to which a seat is attached. The attachment of the tubing to the skis and seat is accomplished by the use of special hinges so the skier, by leaning one way or the other, can change the angle of the skis on the water and steer in much the same way as a standing skier steers The tow rope can either be hand-held or tied to the front piece of tubing

After borrowing the 'AQUA-BAT", some experimentation was in order to find out how to use it The rocky and abrupt drop-off of the lake shore made a deep water start imperative since there simply wasn't any shallow water Shallow water is recommended because it is much easier to steady the "AQUA-BAT" while the skier mounts in shallow water than deep. For the deep-water start it was necessary for us to utilize three able-bodied swimmers to steady the apparatus before take-off One assistant was stationed on each side of the "AQUA-BAT" and the third took a position at the front. We opted to tie the tow rope to the tubing rather than try the hand-held method With the boat, "AQUA-BAT", and assistants in position the first skier, Don Kerstetter, slipped into the cool mountain lake and swam out to the "AQUA-BAT" He positioned himself on the seat and put his feet into the ski stirrups by holding the front piece of tubing with one hand while using the other to maneuver his feet. On the go-ahead from Don, the boat moved slowly forward (the 'AQUA-BAT" doesn't require a full throttle start), the assistants let go, the boat gained speed and Don was up on the first try! He made a fairly conservative trip around the island on which we were camped, thinking more about keeping his balance than trying any fancy stunts His concentration paid off as he made a complete trip without spilling and finished with a smooth landing

Mariann Soulek (a high-level para) and Garry Treadwell (an incomplete quad) also made successful runs around the island, but not without a spill or two We tried two methods for handling spills The first was to have the skier hang onto the "AQUA BAT' and be dragged back to the starting point so the assistants could again help with the take-off This method was slow, tiring, and very chilly for any distance at all, so it was scrapped in favor of the second method pulling the skier into the boat for a ride back to the starting point. This technique also required some effort on the part of the skier and boat driver but we felt it was preferable to the dragging method

The time came all too soon for us to return the AQUA-BAT" to its owners, pack up our gear, and head for home But with another summer here, there will be more time for us – and you – to experiment with the maneuverability of the "AQUA BAT", devise a starting technique that would require fewer assistants, and mostly have fun ■

Reprinted with permission from Sports 'n Spokes (July/August 1975)

PROJECT ON

[redacted]

MERICAN ALLIANCE FOR HEALTH, HYSICAL EDUCATION AND RECREATION

Challenge

VOLUME 11 — NUMBER 1 NOVEMBER 1975

Reaching Out + Reasonable Risk = Growth Adventure

Lee Anna and Rolf H Mielzarek
Owners and Directors
Camp Shenandoah
Winchester, Virginia

"There they go!" With that shout, the group of young people interrupted setting up camp to rush to the river bank. They watched with amusement and a measure of satisfaction as a canoe with two young men in it came sideways down the rapids Their amusement was provoked by the canoeists fruitless efforts to keep from tipping into the swirling waters and floating down into a quiet pool at the end of the run! Their satisfaction rose from their pride that an hour before all 13 of them in their five canoes had come down the same rapids without a single spill or loss of control

With a friendly wave to the two men who were retrieving their canoe at the foot of the rapids, the group returned to putting up tents, building a fire, and preparing dinner with an efficiency rooted in experience and confidence After all, this was the third night that the eight mentally retarded young people and five counselors from Camp Shenandoah in Winchester, Virginia had spent along the banks of the Shenandoah River.

The canoe camp program was our newest effort to add to *reaching out–reasonable risk experiences* for mentally retarded campers. It was born out of a growing awareness that many severely to mildly retarded campers in the camp program could go beyond the scope of our existing canoeing program which consisted of spending an hour or so at a time on the tranquil waters of a three-acre lake.

We had already seen many of them develop from camping out for a single night in a pre-set tent campsite to dealing effectively with three and four day primitive camping outings We were sure that they could master camping: canoeing, water safety, and survival skills to make a canoe trip an exciting adventure

Of paramount importance were careful planning and a capable staff. In planning, years of organizing extended camping trips were very useful in dealing with logistics of camping such as equipment and meals. Two of us went over the entire run several weeks before to identify and plan for both hazards and overnight campsites We decided to have a station wagon carrying all equipment and supplies accompany the group on a parallel course and meet it at the end of each day's run. This freed the canoe party of the burden of packing and transporting their gear and gave them easy contact with base camp or the community for any needs that might arise.

Reprinted from Challenge (November 1975)

Selection of staff proved to be an even easier task. On our camp staff were a number of young people who had been with us for one or more seasons and who had skills to teach and lead our campers on this kind of adventure. We assigned an assistant director to provide administrative leadership and gave our Waterfront Director direct responsibility for the entire program. Another experienced counselor was designated as guide, since he had participated in the planning run several weeks previously for the purpose. We could not have had a more capable and enthusiastic team.

Campers would gain most and enjoy their experience more with a sound training program. From the time of their arrival at Camp Shenandoah on Sunday afternoon until their departure on Tuesday morning for their embarcation point on the Shenandoah River, these teenagers spent almost every waking moment in some aspect of training—and they loved it.

They familiarized themselves with their camping equipment and setting up and striking their tents. They had sessions on handling paddles and canoes. They learned how to change direction of their canoe quickly and how to backwater on a course set up on our lake.

But the most exciting training activities were those focusing on canoe safety and survival. We began by having them fall into the swimming pool wearing their life jackets—a novel experience of familiarization for each of them. Then it was onward to swimming in life jackets, controlling canoe tipping, falling out of a canoe, and emptying a swamped canoe. These were all unique events, rich in developmental opportunities. At the end of the training period, each of our canoe campers had a solid body of skills and sense of personal competence they had not previously known.

Tuesday morning the group went to Luray, Virginia, the starting point of their trip. At the push-off it was clear to both staff and campers that there was some crumbling of that supreme confidence of the previous day. The movement and turbulence of the river presented a far different challenge than the placid lake back at camp. With a succession of deep breaths, we launched the five canoes. Paddles dipped, canoes responded, and confidence began to return. By the first bend, smiles and laughter were back.

Then followed four days of beautiful shoreline and exciting rapids. The greatest challenge was 150 yards of class three rapids encountered two days later which they all successfully passed when many others wiped out. On the afternoon of the fourth day, they arrived at their pickup point, full of anecdotes and adventures, and even more, *full of success and achievement. They had not only learned, they had accomplished.*

The overall assessment of this adventure reaches a wide range of individual and programmatic aspects. Most directly, the impact of these few days on campers and counselors was profound. Campers not only acquired new skills in canoeing and camping, but also greatly increased their self-confidence and self image. Their social and verbal skills also profited from the closeness and interdependence of the group.

The most striking effect on counselors was their new perception and enthusiasm for developing the full abilities and potential of their campers and other mentally retarded persons with whom they would work. They had seen what could be done. They had been part of it.

This had an infectious fallout on the rest of the staff and program. Other counselors throughout the remainder of the summer sought and planned more challenging activities for their campers than ever before. Of course, the canoeing program at camp underwent a major change including many components of canoe camp training. Camping, hiking, riding, trampoline, and other areas also felt the effects. In this way, sights and experiences of every other camper were raised.

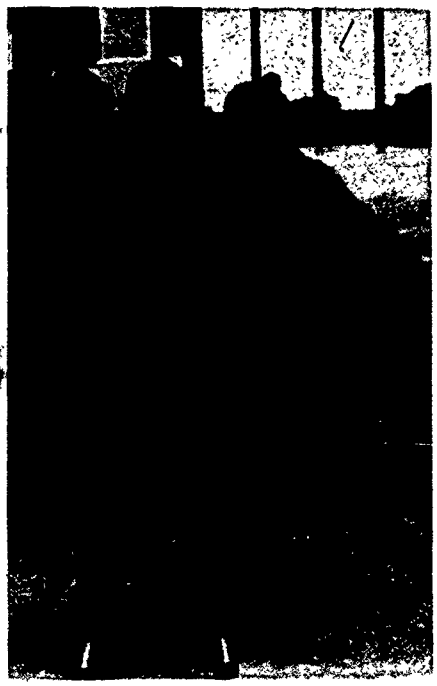
For us, canoe camp provided a resounding confirmation of our commitment to developmental goals and programs for every mentally retarded person regardless of age or functioning level. We were again assured that it is only as we continue to help others grow, that we will continue our own growth.

The most striking effect on counselors was their new perception and enthusiasm for developing the full abilities of their campers and other mentally retarded persons with whom they would work.

The Role of Ice Skating in Adapted Physical Education

By

KURT OPPELT



1st day — a volunteer aid is luring two students to their first step on skates under their own power.

Ice skating can and should play a very important part in adapted physical education. The physically handicapped, the mentally retarded, the post coronary patient, the aged, the chest patient, or anyone with problems of the knee, ankle, achilles, peroneal, or hip joint will benefit from skating. Skating is a very excellent rehabilitation for both the psychological and physical aspects of the body. Any frozen pond, iced tennis court, backyard, indoor, outdoor, natural or artificial rink may be used for skating. Lately it is even being done on "slick," a plastic surface manufactured in the United States. Skating is a fast growing sport and business in America so it is generally possible to find places to skate without traveling any great distance.

Skating, like swimming, is a self testing medium. When a patient moves on his own power, he can improve and correct himself while skating. The proper posture needed for correct balance upon and above the skates will result in corrections of bad habits one had developed over the years. In skating one has to stand erect on the skates, faulty postures result in falling. When following some training and practice schedule, changes for the better will be immediately seen. However, it takes patience not to just speed off but to use all the natural laws of mechanics and other fields of physics. These challenges to thought, without enormous speeds, can be valuable in rehabilitative work. Taking the patient's mind off his ailment and giving him some other task will give enormous help psychologically. Skating, too, is one of the best sports for conditioning (next to running) as it helps to increase the capacity of the organs, muscles, and pulse rate without physically exhausting the patient. The patient sees good results almost immediately when he follows directions.

Skating is directly effective for the blind. After orientation in the rink and when following the word of the person leading him (not holding, if possible) one will be astonished how well the blind person will skate. Champion skaters navigate the same way as blind people do. The head is erect, eyes and ears are parallel to the ice. The turns are done by turning the head into the direction wanted, the shoulders follow, then the hip turns, the foot takes the curve and the direction is changed. The instructor must watch that the patient does not lose direction due to a rough surface which results in loss of balance and orientation. Blind skaters will make excellent ice dancers because of the contact with the partner and the feeling of correct direction change.

When working with the mentally retarded and or the emotionally disturbed the main problem is keeping their interest, especially in a large group. However, once rules have been set and helpers found who will watch over each patient, good results should follow. Concentration and communication of rules will be more effective if done before going onto the ice. The instructor must keep control at all times (watch for the unforeseen, for instance kicking with blades) and must make sure that the retarded individuals know what is expected of them.

To habilitate or rehabilitate all types of individuals needing special help takes more than a teacher's physical skills alone. It takes patience, dedication, and understanding. It is essential for the therapist or instructor to learn as much about each patient as possible by studying each case and observing and evaluating the individual at each lesson. If possible use photographs or films of the person's progress as each accomplishment will spur him on to more progress

Kurt Oppelt is an instructor of physical education at Penn State University. He was Austrian, European, World Champion and Gold Medal Winner in Pair Skating in 1956.

Kurt Oppelt is asking and convincing a student to skate across the rink without any help from him.

"I made it" is yelled as he reaches the far side of the rink. Another success story.

VALUES OF SKATING FOR THE PATIENT

I. Physiological:
   a) Development of organic strength and vitality
   b) Improvement of circulation
   c) Joints become more flexible
   d) Increases breathing capacity
   e) Betters coordination and control of body maneuvers
   f) Increases flexibilty of muscles
   g) Improves posture
   h) Changes ways of thinking and increases mental capacity
   i) Helps to calm the nervous apparatus

II. Psychological:
   a) Results are satisfying
   b) Skills present challenge
   c) Developed skills carry over
   d) Skating is fun
   e) Skating builds up self-confidence through success
   f) Skating has socializing values
   g) The performance of good maneuvers or skills, moving alone on ones own power, makes changes in thinking apparatus and helps overcome bad habits and ill feelings

III. Socially:
   a) Skating offers opportunity to meet new people, to make new friends, helps to create feeling of belonging
   b) Gives possibility to associate with others and provides recreational activities
   c) Gives opportunity of better position through successful performance (competition situation), satisfactory progression will make integration in the society of health or healthier people easier

2nd one hour session finds Kurt Oppelt demonstrating while beginning mentally and physically handicapped students are gliding on one foot.

3rd session — Students are moving on their own power across the rink. Note the balance, upright position and proper setting of feet for skatng.

UNDERSTANDING THE STUDENTS

1. Gain confidence of the student,
2. Sell yourself to the student,
3. Do not sympathize, but understand student's problem,
4. Know all details of each specific case,
5. Keep an open mind, learn, observe, and lead the patient, but do not force him, give always the feeling of self-discovery,
6. Recognize limitations, conditions of patient; let him learn to the fullest extent of his capacity without making him feel he's being pushed,
7. Keep instruction simple and explain as often as possible. The understood word is more valuable than copying of demonstration,
8. Teach in the same way as with a normal person, for skating is a natural sport and means of rehabilitation, everybody who can walk, can skate, having bad walking habits or not. It is your task to bring patient close to normal walking habits.
9. Let the patient work through fun and games,
10. Set goals, skills, work out and then make skating the most enjoyable experience in the patient's life. Think that skating should better and/or overcome the ailment. Once you have brought the patient as far as forgetting the ailment for even a moment, you are on the best way to rehabilitate or habilitate the patient permanently,
11. Never give up helping the patient, keep control over your moods and emotions. Give the patient the feeling of being an equal and not an outsider, for only then will you be successful in your task of helping.

Completion of 5th and last one hour session. A group of happy and successful handicapped youngsters wear their badges and enjoy party goodies.

Issue of MARCH, 1972

Reprinted from Pennsylvania Journal of Health, Physical Education, and Recreation

PROJECT ON

[redacted]

AMERICAN ALLIANCE FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION

Challenge

VOLUME 10 – NUMBER 1 JANUARY 1975

CROSS COUNTRY SKIING for the MENTALLY HANDICAPPED

Cross country skiing is a fast-growing and popular winter activity. Benefits from this lifetime sport include increased strength, endurance, balance, coordination, and appreciation for nature's winter beauty. Equipment can be obtained with relatively little expense.

Riverview School, a public school for mentally handicapped children in Manitowoc, Wisconsin, initiated a cross country program for intermediate and junior high school aged mildly retarded (educable) students during the 1973-74 school year. A local ski hill and ski shop owner donated 20 pairs of old, wooden, downhill (Alpine) skis and helped staff and students convert them into cross country skis. Metal edges were sawed off to make skis lighter and thinner. Special cross country bindings that fit regular outdoor boots or overshoes and poles were purchased at cost from the same ski shop owner. Students in industrial arts education classes and several staff members dismantled bindings, sawed skis, and mounted new bindings.

To facilitate fitting, skis and poles were marked. Bindings were sized small, medium, and large. Size was determined according to probable shoe sizes of these intermediate and junior high school students. Small bindings were mounted on short skis, medium on medium-length skis and large on long skis. Colored plastic tape with the letters *S* (small), *M* (medium), and *L* (large) were attached to the respectively sized skis. A number or letter at the toe of each pair of skis distinguished one pair from another.

Poles came in sizes 48 inches through 56 inches. Colored plastic tape placed on shafts distinguished various sizes. As students were fitted, the ski number and pole color were recorded. Students used the same equipment throughout the unit. By snowfall, skis were usable and the program began.

Prerequisite to cross country skiing seemed to be *if you can walk you can cross country ski*. This rule was appropriate for the Riverview students with the exception of students who had difficulty maintaining balance while walking on snow. With some adaptions in equipment students with crutches also participated. A basket similar to those found at the end of a ski pole was attached to the crutch tip to prevent it from pushing deep into the snow. (cont'd p 8)

Nola Sinclair
Physical Education Instructor
Riverview School
Manitowoc, Wisconsin

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Orientation What is cross country Safety Care of equipment Clothes Waxing Fitting	*Free Exploration*	*New Skill* Moving in place Falls Getting up	*New Skill* Moving in place Step turns	*New Skill* Moving on flat land Diagonal stride
New Skill Moving on flat land Diagonal stride	*New Skill* Moving on flat land Double poling	*New Skill* Moving uphill Side stepping	*New Skill* Moving downhill Straight run Moving uphill Straight uphill	*New Skill* Moving downhill Traverse Moving uphill Traverse
New Skill Moving uphill Herringbone	*New Skill* Moving downhill Snow plow	*New Skill* Moving downhill Step turn	Given a marked trail on and near the school playground area, students move as far as	possible during the first half of the class period and return during the latter half

Student orientation included discussions of cross country skiing, safety and care of equipment, proper clothing, plus the how and why of waxing skis Students also learned how to fit themselves properly with the correct size poles and skis

During the first lessons on the snow, students simply explored what they were able to do on skis. Individual exploration gave students practice in standing after a spill, adjusting body positions for maintaining balance, and putting on and adjusting bindings

As students became more accustomed to movement on skis, various skills were introduced and practiced. Because of vast differences in balance, coordination, and skill acquisition, much time was spent in free exploration and practice of given skills. Students were able to benefit from individual assistance and each progressed at his own rate. Talented youngsters were not stifled and slower students not frustrated by unrealistic expectations.

The unit ended with a cross country trail hike. Given a marked trail on and near the school playground area, students moved as far as possible in the first half of the class period and returned during the latter half This gave students a real cross country experience.

The following is a three-week cross country skiing unit designed for beginning educable mentally handicapped skiers, each lesson is designed for 40 minutes. With the exception of the first two and last two lessons, the time schedule is 1 5-10 minutes to obtain equipment; 2 5 minutes for exploration and practice, 3 10 minutes for discussion and demonstration of new skill; 4 10 minutes for exploration and practice, 5 5 minutes to return equipment.

Suggested references

Baldwin, Edward R *The Cross Country Skiing Handbook* Toronto, Ontario Pargurian Press Limited, 1972.

Bennett, Margaret. *Crosscountry Skiing for the Fun of It* New York Dodd, Mead & Company 1973

Toker, Art, and Luray, Martin *The Complete Guide to Cross Country Skiing and Touring* New York Holt, Rinehart, Winston 1973

United States Skiing Association Rocky Mountain Division, Ski Touring Sub Committee *RMD Ski Touring Instructors Manual*

Note. See *Challenge Books* and *Films* for information about additional resources

Reprinted from Challenge (January 1975)

SNOW PAINTING

It's fun to use powdered tempera paint in a shaker container to create a picture in the snow. The powdered paint can be placed in a salt shaker or babyfood jar with a hole or two punched in the top..

A day without wind is necessary to avoid having the paint land on the students. Painting along the edge of things is easiest. Tracks in the snow mess things up if the student walks into the area he is painting.

It may be possible for a student to "shake paint" in a larger area by incorporating his tracks into the picture, or it may be possible to put the shaker on a long stick for a larger picture.

Taken from Camp Confidence's Snow and Ice Activities.

MANUAL COMMUNICATION WITH DEAF RIDERS

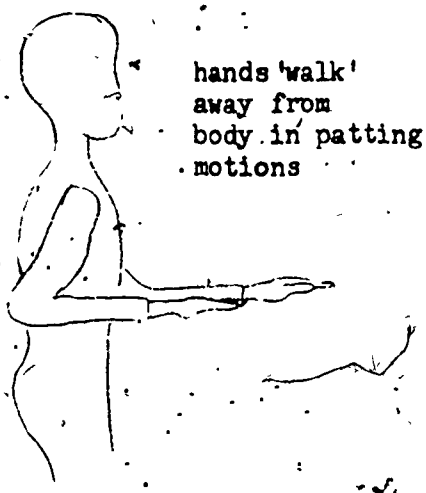
Cathe Busack, O.T.R.

To teach horsemanship to people with hearing impairments, it is necessary to use the medium(s) by which they have been taught to communicate, e.g. lipreading, the manual alphabet, etc. The riding instructor should learn these, and should direct and correct the pupils himself rather than asking a teacher or parent to "translate."

Pupils will imitate posture, so that some corrections in riding position can be demonstrated from the ground or from horseback. Lipreading, the manual alphabet and manual phrases can be utilized easily when the instructor and class are close together or standing still. However, to communicate from the center of a ring during an active riding class requires a set of simple, highly visible gestures.

A series of these have been developed at the Cheff Center for the Handicapped. Pupils learn signals early in their course of instruction by watching another person ride according to the hand signals of the instructor. New signals are added as riding skills are developed. The following diagrams represent the present repertoire in use at the Cheff Center.

Walk On:

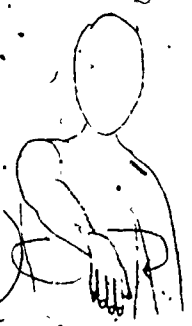


hands 'walk' away from body in patting motions

Reverse:

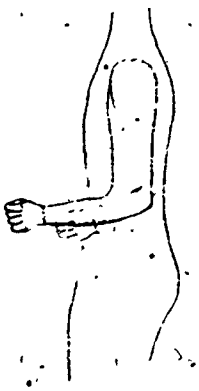
hand does a "U" turn in the air in the direction to be taken

Circle:



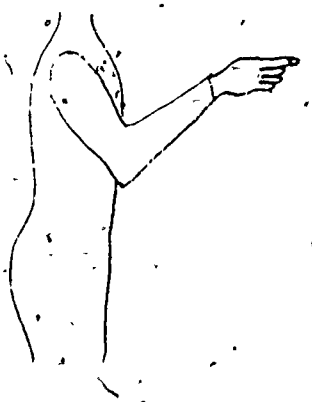
hand "circles" clock-wise or counter-clockwise by bending at the elbow

Slow Down:



hands pull back towards hip as if on horseback

Steering Through Poles:



finger/hand move in weaving motion as they move away from body

Sit Down:

both hands cup under seat; bend knees and hips to lower body a few inches

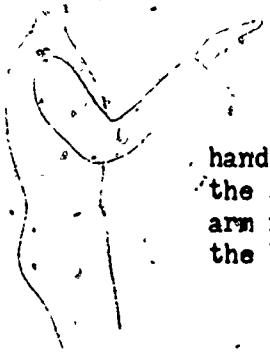
Forward Position:

hand held at shoulder height; cupped towards face; lift cupped hand up

Posting:

begin as in forward position and turn hand over while moving down; repeat up-down with hand turns

Trot;



hand "pats" the air while arm moves across the body

Canter:

hand-arm hops across front of body while holding sign for letter "C"

Shorten Reins:

Mime action as if on horseback

At present there is need for gestures to back the horse; to remove the feet from stirrups; to cross and uncross the stirrups over the horse's withers; to put feet back into the stirrups; to lengthen the reins; to rate striding and speed within a gait; to perform schooling figures; to follow a particular diagonal at the trot or to pick up a particular lead at the canter; and to approach, jump and land at a fence.

The author is interested in developing a "handbook" of manual signals for deaf riders. Please will anyone who has worked out their own system and would like to share his or her ideas write: Cathe Busack, c/o T.R. Brown, Larger Cross Road, Bedminster, N.J. 07921

Reprinted with permission from NARHA News (November 1975)

Survival Camping With Problem Youth

Thomas R. Collingwood, Ph.D.

With the ever broadening scope of rehabilitation services to problem youth comes an increasing demand to deal with the "total" person. The person's physical and psychological-social needs, as well as his vocational-educational needs, must be dealt with if successful rehabilitation is to occur. This, in turn, leads to an openness in all potential program services aimed at the rehabilitation of problem youth (the delinquent, drug abuser, dropout) and potential problem youth (the disadvantaged, the turned-off).

This need led to a cooperative effort by the Arkansas Rehabilitation Service, Aldersgate Methodist Camp of Little Rock, and the Arkansas Rehabilitation Research and Training Center to develop an innovative client service program that had the potential to positively affect the "total" person. The end result was the development and implementation of "Operation Survival," a rugged, 3-week camping program designed as both a client service and as a demonstration project for problem youth in Arkansas.

Operation Survival's goal was to develop more positive behaviors and attitudes in all areas of functioning, including the physical, intellectual, interpersonal, and emotional areas. We felt that a therapeutic camping program with a strong physical base could meet this concern.

The basic premise underlying the program and inherent within the intensive, physical, 24-hour camping and survival experience is that the therapeutic potentials of such an experience could have a potent impact upon the rehabilitation of problem youth. In turn, the camping program is built to function: 1) as a systematic program that demands increasing increments of performance and produces, by design, increased levels of successful accomplishments; 2) as a functional program in which the experiences, demands, and reinforcements placed upon the clients are relevant to their day-to-day survival; 3) as an inexpensive program that uses existing community resources and functional, nonprofessionals as staff; and 4) as an integrated program within a client's total rehabilitation program. Within this perspective, the camping program is viewed as an initial therapeutic service to prepare clients and get them "in shape" for the vocational rehabilitation process in terms of more effective and positive behaviors and attitudes.

Clients, Staff, Resources

Twenty-one boys between the ages of 15–18 started the program. One boy didn't complete the program for medical reasons and one quit. The remaining 19 completed the 3-week program. Three of them were from one of the training schools in Arkansas, 10 were from the Arkansas Rehabilitation Service First Offender Program, and six were from a large rehabilitation facility. All 19 were rehabilitation clients and were volunteers. They were encouraged to enter the program by their rehabilitation counselors.

Aldersgate Methodist Camp (a resident camp in the Little Rock area) provided facilities for the initial training stage. Several items of field equipment were borrowed from the National Guard. The Ozark National Forest served as the area for the backpacking and survival portion of the program. Staff con-

Dr. Collingwood is a research associate at the Arkansas Rehabilitation Research and Training Center, Hot Springs, Arkansas. He is coordinator of the program described here.

sisted of one coordinator (myself) from the Research and Training Center and four camp counselors from the resident camp.

Program Overview

The program lasted 3 weeks. Campers and staff formed six-man teams with one counselor and five boys composing a functional unit.

During the first 8 days at the resident camp, the boys learned basic survival and camping skills and underwent physical conditioning. The latter consisted of running, calisthenics, and hiking. Skill training in outdoor survival encompassed personal and camp hygiene, fire building, food and water procurement, cooking, shelter making, hiking and backpacking, orienteering (mapping, reading a compass, etc.), first aid, and general campcraft.

Following basic training, a 9-day backpacking expedition took the clients through the Ozark Mountains. Everything needed for survival was carried on their backs. A portion of their food had to be secured from the land (snakes, polk salad, fish, crayfish, burdock plants, wild berries, sassafrass roots, and water). Toward the end of the 9 days, pairs of participants were sent on a 24-hour survival session where they secured their own shelter, food, and fire.

After returning to the resident camp, the participants spent 2 days in group counseling and recreation. The major thrust of the counseling was to consolidate the gains from the physical experience, both conceptually and verbally. Specific content also focused upon their future plans and the implications for successfully completing those plans.

Program Considerations

At all stages, the program was run systematically. During basic training, skills were taught at a group and individual level so that competency could be obtained regardless of initial level. Skills and physical tasks were taught and attempted from the least difficult to most difficult. From the basic training to the end of the backpacking phases, the participants earned increasing responsibility and decision-making functions. Every day, especially during the basic training phase, certain tasks and goals had to be met. Self discipline was a prime goal. Rewards, such as coke breaks, smoke breaks, and free time, were systematically employed or withdrawn to increase skill acquisition and cooperative work effort.

The key reinforcement, however, was the functional aspect of every part of the program. Thus, from the very beginning, in resident camp, they had to build their own shelter and cook their own food. This placed a very real demand on them to learn the skills and to cooperate with each other in order to meet day-to-day necessity needs. The boy who quit, for example, was not able to meet these functional demands. He refused to help get meals, and the other campers would not let him eat without his contributing to the process.

Survival Camping means exactly that. Here "Survivors" construct a table.

This functional operation was most pronounced during the backpacking phase when the meeting of everyday needs and day-to-day survival was dependent upon individual and group performance. How well an individual got into shape during the basic training phase affected his backpacking pace and, in turn, his group's pace. How well an individual learned to read the stars, compass, and maps could determine whether he or his group got lost. How well an individual learned to find food and water directly affected his own and his group's survival. Cooperation, responsibility, leadership and "followership" were functionally demanded 24 hours a day. If not attained, one went without shelter, fire, food, and water.

Intense functional program aspects, especially during the backpacking phase, were further exemplified when the participants had to learn to perform while fatigued, lonely, scared, and at times uncertain as to what was going to happen. These situations were in daily evidence in such pursuits as finding food and water, climbing mountains, and orienteering (not getting lost). There were some dangerous challenges, as well. Encounters with poisonous snakes were a daily occurrence and there were black bears in the area. This, coupled with the new and unfamiliar surroundings, served to make the process functionally confronting for the participants.

When the boys first entered the camp and as a result of not knowing what to expect, they were somewhat apprehensive. As the basic training phase got underway, they loosened up and became more confident. Most of the boys were in poor physical shape and had never camped before. Consequently, much effort had to be put forth on basic campcraft, physical training, and hiking. It took them a few days to learn to work together. But since they were in a functional situation where they were forced to work as a unit, they were working as a team by the end of the basic training week. Once they had gained a level of competency and knowledge to survive in the woods and work with each other, they were bussed up to the Ozark National Forest and mountains for the backpacking phase of the program.

A Long Trail To Blaze

The first few days in the Ozarks were fairly hectic. Originally we planned to cover approximately 100 miles within a week; however, it became clear the boys were not physically able to accomplish that. At the same time, the planned water sources (intermitent streams) were dried up and securing water became a real problem. One of the boys who went up a draw to find some water got lost. When we found him we discovered he hadn't found any water but had found some old cans of beer a deer hunter had left. His thirst, at least, had been satisfied!

The lack of water necessitated an alternate plan and the boys helped decide upon one. They planned to blaze a trail down an intermittent stream called the Illinois Bayou. Each group set out on its own. Along the bayou there was a steady supply of food and water (crayfish, fish, polk salad and snakes). A couple of the boys almost were bit by copperheads and cottonmouths; however, not only did they learn to be careful but they became adept at skinning and eating them. A few of the boys, at first, were leary at night because of the snakes and of the black bears in the vicinity. One boy woke me in the middle of the night claiming there were bears in the camp. Although none were sighted, he persisted and finally I told him to build a fire. An hour later, there was a campfire as big as a house that could have turned into a forest fire! No one worried about bears after that.

On Their Own

Toward the end of the backpacking portion of the project, pairs of campers were sent out to survive on their own for 24 hours. Some of the boys were very ingenious in the shelters they built, but one pair was the most creative. With map and compass they struck out across country and reached a small town 15 miles away. Their survival meals consisted of food and soda pop while the others had greens and sassafras tea, if they were lucky.

All of the boys demonstrated ingenuity in many ways. Most were heavy smokers prior to the program, and they craved tobacco so badly that many would roll dried leaves and dried grass into cigarettes made with tissue paper. In all respects, it could be said the boys learned to survive in the camping situation.

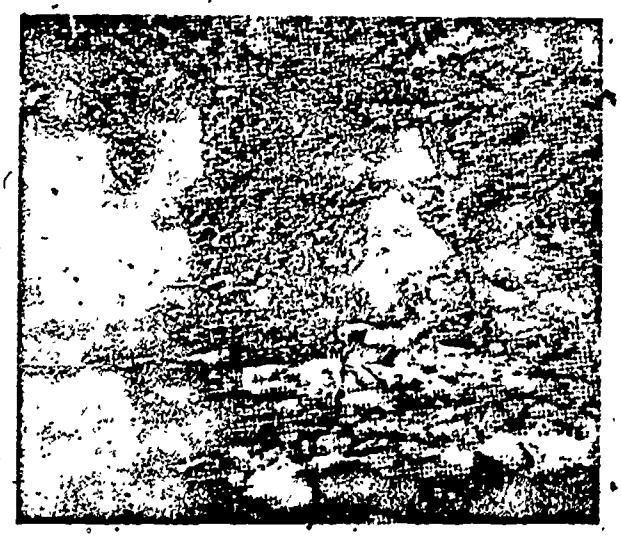
A Time For Assessment

The last 2 days, back at the resident camp, were spent in group counseling and discussion. The boys voiced a real pride in what they had accomplished. A major goal that many of them had developed was "just to make it," and they all did. They all were

confronted with the fact that they had accomplished a lot in the program and were now better able to accomplish something in their life situation back home. Further plans to follow through or in terms of education or vocational training were discussed.

In viewing the participants' progress through the entire program, there appeared to be two basic types of boys. The majority appeared at the start to have many inadequacies and little strengths. It seemed that they turned to drugs or antisocial behavior as a self defeating means to overcome these inadequacies and belong to a group. The camping program served as an intense success experience, "filling" them with adequacies and accomplishments that increased their self-confidence and self-esteem. A good example was Brian. Prior to the program, he was so skinny and weak, he was afraid to try anything for fear of falling. Following the program he would tense his biceps and claim a two-inch gain (he actually lost weight as everybody did due to the diet!). But the important thing was that he thought he had!

(Above) A welcomed break in the day's march. Although feet may be sore, spirits soar. (Below) Crawdads for a stew? You bet. And what a flavor!



There were other boys who had many adequacies and strengths, but they would use these resources for whatever end they wanted to achieve and tended to make a game of everything. These boys learned to cooperate and act more responsibly as time went on. Especially in the Ozarks! The program offered them an alternative direction in which to use their resources. A good example is Ralph. Prior to the program he had been a floater, bouncing from one thing to another. After the program he worked the rest of the summer as a camp counselor and functioned effectively, and he is currently in school.

Several assessment measures used indicated that the participants made significant and positive gains in physical fitness, body image, self-concept, and self-acceptance (sound body, sound mind). Behavioral ratings by the participants' counselors and parents indicated significant improvement in physical, intellectual, emotional, and interpersonal behavior. Evaluations by both the participants and their rehabilitation counselors rated the camp program as having a significant effect on their rehabilitation and personal factors affecting rehabilitation.

The participants' status 3 months following the camping program also bears out the program's positive effect. Prior to the camping program, three of the boys were in vocational training, one was in school, none had a job, three were in training school, and 12 were on probation, doing nothing. Three months following the camp program, eight were in vocational training, seven in school, two on jobs, none in the training school, and two unaccounted for.

The sources of gain for the participants were derived from the functional and systematic process. At one level, the survival camping process functioned as a vehicle to provide a learning and therapeutic success experience. The participants were able to leave the program not only with a sense of accomplishment, but with more effective behavior and attitudes relevant to their rehabilitation. Such an approach to problem youth warrants consideration as a key therapeutic program to be employed as an integrated portion of a total rehabilitation program, perhaps as a first step service prior to educational and/or vocational training. ■

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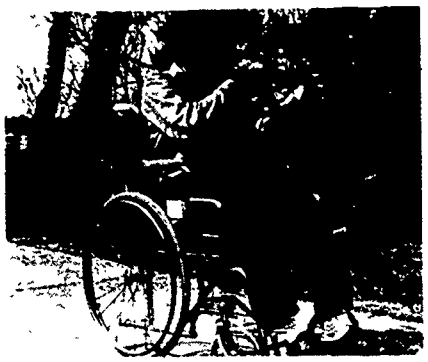
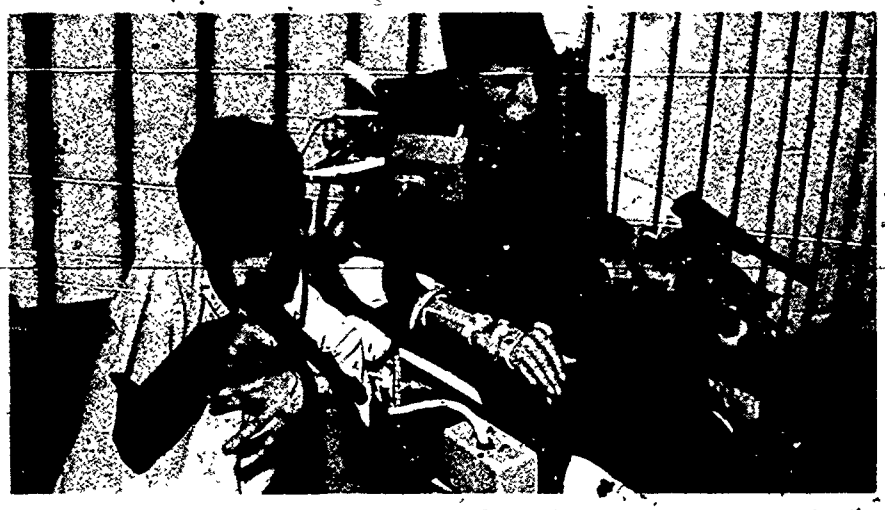
Medically Approved shooting skills programs are teaching crippled children to overcome grave handicaps

GUTS, GRIT

by Jack Harper





When you and I go out to shoot on a crisp Saturday morning, most of our problems are left behind. That's why we go, isn't it? Well, let's say that we two have to be wheelchaired out to our range next weekend. And let's say that it hurts to pick up even a BB gun — which somebody else has to pump for us at each shot. Not only that, let's say that we are exhausted and happy if we can clean a course consisting of two 15-foot distant rifle targets and about 150 feet of spirited wheelchair racing, in four or five minutes.

If you're ten or eleven, with muscular dystrophy, or amputations or — name it, and somewhere there is a child fighting to overcome it — being able to compete on an equal basis with anybody else is an all but impossible dream. Shooting is one of the few sports where this possibility exists.

Perhaps for the same reasons that many champion shooters just get better with age, handicapped children can often improve their health as they build skill at shooting. Over 3000 children have shown concrete improvement in the nine years since the beginning of the Daisy BB Gun Program For Handicapped Children, as given at the Gillette State Hospital, St. Paul, Minn. Still others have received similar therapy at the University of Virginia's Children's Rehabilitation Center in Charlottesville, Virginia.

In addition to the thousands of crippled children who have received training in air riflery, pistol shooting and even air-gun trap, some 200 instructors have been taught how to use air arms in rehabilitational recreation.

Acceptance by patients, parents and doctors has been almost 100 percent favorable. Few of the kids are removed by parents once they are exposed to the course. Said one doctor about the program, "There is very little in a well-supervised gun program that will be harmful to a physically handicapped child. As a matter of fact, there are too few people willing to give the handicapped an opportunity to learn gun handling. For some of them this could be the best thing that's happened."

Some form of shooting therapy has been in existence at Gillette State Hospital since 1954. The original program was a .22 rimfire-based 50-foot range group, formed and endowed by American Legion Post #5 of St. Paul, Minn. A shortage of qualified instructors caused a lull from 1957 to 1959. Then, Ernie Davis, who has since left, began an air-rifle group and formulated the basics of this type of effort.

The choice of Daisy spring-piston powered air rifles was made at this point in shooting therapy development for the following reasons: first, they pose less hazard to beginning shooters (and instructors who are therapists first and shooters second, as they must be), second, that the Daisy-type arms had a low but consistent power from shot to shot; third, the 15-foot range for air-rifle target shooting is as hard to "clean" as the 50-foot range for .22 Short rimfires.

In the case of the more recently adopted Daisy CO2-powered pistols, the above reasons are largely true, along with a 500 percent saving in shooting costs. Contrast one .22 for one cent with five Daisy pellets for one cent. Many more shooters and shots are possible with this ratio.

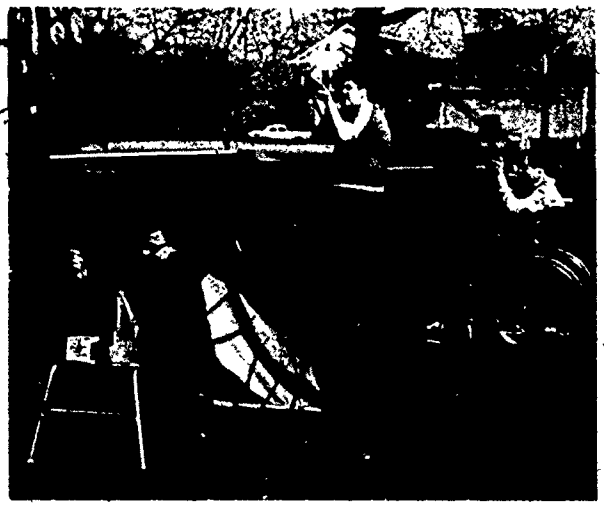
We'll go into the special virtues of pistol practice later in this article. For now, let's just mention that mastering any of the Daisys, according to program directors Lee Rullman (Gillette) and Ron Adams (Virginia Children's), can give a handicapped child all the therapeutic value of shooting powder arms, without attendant lethal hazards.

Reading the course descriptions issued by the two collaborating institutions shows that crippled kids have the same problems of any beginning shooters — only more so. Breath control, eye and hand coordination, perhaps even the simple ability to stand upright for any length of time, all may be being learned for the first time in a nine-year old's life.

But they make it; some have even gone on to local claybirding competition. They don't break records, but they shoot. From crutches, and wheelchairs, and their own unsteady, shortchanged pins, they go to the line and shoot alongside their friends and neighbors.

A goodly number, says Gillette course director, Lee Rullman, even manage to take to the field come hunting season. He notes, "As far as I know,

& GUNS



Picture at far left shows pistol shooters using both wrist brace and mouth-trigger, lap-board devices. The wheelchair rider is a contestant in the wheelchair biathlon. At near left is close-up of the pistol machine rest and mouth-trigger, for those who can shoot no other way. Above is shown air-gun trap layout, which provides exercise and stimulation for trap operators as well as shooters. All photos are courtesy of the U. of Virginia Dept. of Graphics.

none of our trainees have competed (registered shoots). There have been a few who enter local skeet shoots and rifle clubs. There are many who go deer, pheasant and duck hunting."

How do you take a crippled boy or girl and make them good enough, safe enough and confident enough to go out after deer? You start from the beginning, with breath control, trigger squeeze and sight alignment on the 15-foot range. Since many of these children have the need for frequent visits to the hospital, their shooting courses are sometimes quite lengthy.

When instructors and doctors agree that the time is right, the handicapped shooter becomes a contestant in the Wheelchair Biathlon and/or Air-Gun Trap. As the term "Biathlon" suggests, this event is based on the idea of cross-country skiing and rifle shooting. In the crippled children's version, which was introduced by Ron Adams and Lee Rullman, contestants go, one at a time, in wheelchairs around a planned course between 100 and 300 feet long. At two points along the way, they stop, unstrap a Daisy air rifle from a special holder mounted on the chair, and shoot at a regulation 15-foot target. Both time and target are scored, with adjustments made for illnesses which add *extra* difficulty to the course.

Even quadriplegics (those children who have no use of any limb) can compete, using a motorized chair and a pistol which is mounted on a board held on the shooter's lap. So, don't complain about the inconvenience next time you find you've brought the wrong shooting glasses to the range with you.

In every case, helpers are posted along the way of the Biathlon. They cock the BB guns, coach the shooters and help strap the guns, uncocked, into chair carriers before the next leg of the course is started.

The Wheelchair Biathlon can be as gruelling to a handicapped child as the Decathlon is to an accomplished athlete. If you or I undertook it without being checked-out in the intricacies of wheelchair manipulation (there are some) or without knowing our particular rifle's sights, how well would *we* do?

For those who can progress past the 15-foot target stage of shooting, air-gun trap shooting has been added. Using the indoor-outdoor BB trap range made by Hamlin Products (McNeil Corp., Akron, Ohio) a Daisy M-199 rifle (sightless for instinct pointing) is adapted to flying targets.

Like the other events of this program, BB gun trap is more than just therapeutic recreation. By learning an amputee's capabilities at trap, when he uses an artificial support for the gun, therapists can check out his abilities to reach and surpass his earlier scores after an artificial limb is fitted.

In company with Pete Rademacher, the developer of the trap range used, Rullman and Adams make the point that "Trap shooting provides for recognition, social approval, competition and improvement in self-image" for handicapped children. Or anyone else, for that matter.

In early stages of BB trap, coffee cans and round trays are used as targets to build shooter confidence. Wheelchair and walking patients are stationed at 10 feet from the trap house at first, gradually moving back to 15 – 18 feet.

If the child has been able to graduate to this stage, he may be able to learn to cock his own rifle. Otherwise, helpers are still placed with him.

Children as young as six have been started in the trap program. Its founders state that they also believe in the use of adult trap in vocational rehabilitation centers, VA hospitals and other such treatment centers. Interestingly, they note that wheelchair-bound shooters of any age have often proved to be very capable shooters, due to the solid base of the chair.

The originators of this air-arm conditioning therapy feel that pistol shooting is especially beneficial in the case of patients so severely crippled that they cannot handle a long arm at all. Even a quadriplegic can gain much beneficial conditioning from learning to pull the trigger by mouth, with the pistol mounted in a rest. With the pistol and rest set onto a lap board, a D-shaped mouthpiece is attached to the trigger-pull bar. Try pulling off a pistol trigger by yanking a string in your teeth sometime; you'll see that it takes practice to draw back evenly and get a surprise let-off.

Pistol course material states, "In spite of difficulties, the sport of pistol shooting is an excellent program addition that pays dividends to the shooter, the instructor and the program."

Along with an ingenious, inexpensive-to-construct pistol machinerest and mouth trigger-pull, there exists for the pistol program a 'wrist stabilizer'. This is composed of wrist straps with a U-shaped channel of metal which supports the pistol muzzle along the back of the shooter's left wrist.

continued

GUTS, GRIT, AND GUNS
continued

Several other types of "adaptive equipment" have been devised by Rullman and Adams, to make shooting easier for the more seriously handicapped. The simplest and most common is the wheelchair or bed lap-board. It forms a firm rest for elbows or pistol machinerest, when the shooter must sit or semi-recline.

Next comes the tripod BB gun holder, permitting a shooter with weak upper muscles to aim the gun while its weight is supported for him. A further refinement is the Trap Suspension System, an easily-made wooden crane affair, which supports the gun's weight from above. It allows free movement of the gun over a large area, to cover a "clay."

For competitors in the Wheelchair Biathlon, the wheelchair cross-country gun holder was invented to permit an airgun to be carried safely on the chair. This permits the operator's hands to be free while wheeling from firing point to firing point.

Without making up the extra equipment mentioned, the course directors would not have been able to include 25 percent of the more "severely involved" children who participate. Otherwise, the kids would not have been able to shoot at all. A simple thing like a tripod barrel rest can make quite a difference in a child's life, as it did in the case of Earl. As Lee Rullman puts the story . . .

"One boy, paralyzed with polio in the arms and trunk, recently won a Boy Scout shooting match. We used the tripod for the barrel, rested the gun butt against his shoulder and he aimed, since he could still get his head in position. He would tell me to 'move to the right', 'down,' 'to the left' until the gun was aimed. Then Earle would say, 'slowly squeeze the trigger.' If by chance, or my mistake, we missed or had a bad shot, he would give me a funny look and say 'you missed.' If we had a good shot, it would be 'I hit it!' After he had won the match, Earl was happy as could be and he kept saying 'I won, I won.' Then he looked over at me, and with a grin on his face, Earl changed it to 'we won'."

A study of the pictures of these children as they struggle to take aim and hit reveals the appeal of shooting to them. Even the most "severely involved" patients put their hearts into this doubly hard competition. Effort and intense concentration etch lines of newfound strength on their faces.

It is tempting, but probably unfair, to suggest that shooting clubs try to implement their own handicapped children's shooting program. To properly administer its therapeutic side, shooting instructors must also be well-schooled in educational/motivational techniques, physical therapy and the pathology of the diseases involved. Still, a club could endow equipment for such a plan. As a PR program, as well as a plain good deed, working with your local children's hospital or any-age rehabilitation institution can hardly be beaten.

Lee Rullman put it very well, when he summed up his feelings about the program: "I am convinced that if any individual is going to grow and progress as a member of society, he should enter into activities that are used by his peers. Shooting (especially in a state such as Minnesota, with its hunting lands and large numbers of game) is one way this is accomplished.

"In addition, if we can, through a high interest activity such as shooting, reach a heretofore inactive boy or girl, we have established a base from which to branch into other areas of life. This is the real meaning of any activities in rehabilitation — to establish a base and use it to produce an active, vital and interested member of the community."

Think about it!

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A UNITED STATES GUIDE TO NATURE CENTERS AND TRAILS FOR THE VISUALLY HANDICAPPED by John Knorr

PREFACE

In this age of increasing awareness of fundamental ecological relationships -- that all things are related to everything else -- we are all becoming acutely sensitive to the problems of our environment. For decades resource agencies, park administrations, and concerned private groups have carried out extensive interpretive programs which have influenced this coming of age of ecology and have helped to make ecology a household word. Only in the last several years, however, and only as a by-product of the ecological age, have these agencies and groups begun to intensify the message of nature interpretation and carry it to the disadvantaged and handicapped of our society.

Fragrance gardens for the blind, providing passive experiences, have existed for a long time, but not until recently have the visually handicapped been afforded greater opportunities for learning about the basic interrelationships occurring in natural ecosystems. Interpretive services for the blind are relatively new on the environmental scene because traditional information-and-education techniques employed media which ordinarily created visual impacts. Approaches like visual displays and slide presentations create a most dramatic impact, but such methods provide minimal utility for a meaningful experience for the visually handicapped of our communities.

The visually handicapped person has learned to depend on his other senses to lead a normal life, and uses touch, hearing, and smell to interpret the beauty of the world around him. People without the handicap often overlook or are not aware of the experiences derived from other senses. Indeed, visually handicapped individuals often have developed keener sensitivities through their other senses.

By incorporating slight modifications in present interpretive techniques, several nature centers and trails are now capable of introducing the visually handicapped to an understanding of the natural processes on which our very existence as a species depends. But none of these centers or trails attempt to cater directly to the visually handicapped, and participation by the general public is heartily encouraged, in keeping with the American Foundation for the Blind policy on services for the blind. All of these facilities are "available to all persons in the community and not so set aside or designated for the enjoyment of one special group."

Information on these specific nature centers and trails has been fragmentary and widely scattered in the past. Though not assumed to be totally inclusive, this Guide has been compiled from a variety of sources in order to bring together information on as many facilities as possible. All facilities listed in this Guide are available to the general public and visually handicapped alike.

Hopefully the Guide will be a beneficial source of information

for any agency or group planning a nature center or trail which will include provisions for use by the blind. Every effort has been made to obtain accurate descriptions of each facility from a questionnaire survey, though in some cases information was incomplete.

The ultimate purpose of the Guide is to provide an index of interpretive facilities whereby the visually handicapped may broaden their personal life styles and extend their realm of sensual perceptions. Each facility should be able to provide a meaningful recreative and educational experience for them. Through these facilities the visually handicapped individual may enjoy, in the company of his sighted friends and family, the splendor of observing natural phenomena in a new and meaningful environment.

The final list, however complete, could not have been accomplished without the help of many.

The author wishes to express his appreciation to Professor Clay Schoenfeld, Chairman of the Center for Environmental Communications and Education Studies, the University of Wisconsin, Madison, for his full cooperation and the use of the Center's facilities while undertaking this project.

A special thanks is extended to Robert Lewis of the Educational Research Group, Aspen, Colorado, who pioneered the concept of nature trails for the visually handicapped in the National Forests and contributed a wealth of information to this project.

Several groups and agencies aided as invaluable sources of information in the preparation of the Guide, and are credited here:

(1) USDI National Park Service	Washington, D.C.
(2) USDA Forest Service	Washington, D.C.
(3) National Audubon Society	New York, NY
(4) The American Nature Study Society	Homer, NY
(5) The Association of Interpretive Naturalists	Derwood, MD
(6) The Ohio Academy of Science	Columbus, OH
(7) The American Foundation for the Blind	New York, NY

And finally my sincere thanks are extended to all the field agencies and private individuals who enthusiastically responded to the survey questionnaire and provided the information necessary to complete the Guide.

J. K.
1 June 1972

ABOUT THE GUIDE

This Guide lists nature centers and trails for the visually handicapped by states. It lists the facility name, location, administering agency or organization, trail length, land base of the area, and the availability of special interpretive programs.

Most trails employ kick rails or guide ropes that the blind may follow independently. Many trails utilize large print and braille signs to convey the interpretive message of the respective area. Others incorporate playback tape recorders to explain the different points of interest along the self-guiding trail. Braille guidebooks are also used at some sites to permit greater personal freedom of exploration by the visitor.

Existing unmodified nature centers and trails have great potential value for the visually handicapped with the availability of braille guidebooks. The guidebooks offer major advantages over actual trail modifications in that the initial capital outlay is much lower and the potential for vandalism is slight. However, the question of which type of I-and-E technique is most effective has yet to be answered.

Since many of the facilities are provided by private organizations, advance inquiries may be required and are advised for all visitors to assure the facility's availability. Most centers require advance arrangements for group use so that staff naturalists may be on hand to provide assistance and special programs at the time of the visit.

In addition to the nature centers and trails useful to the visually handicapped, many fragrance gardens have been listed in the Guide, though descriptive information is not included. Fragrance gardens may provide similar experiences because they are typically planted with strongly scented aromatic herbs and shrubs. They too are intended for general public use, not for exclusive use by the visually handicapped.

A supplemental list of references is included with the Guide to provide additional background information on interpretive services for the blind. The reference list includes articles which describe in greater depth some of the nature centers and trails in the Guide. The articles should be invaluable sources for anyone considering similar interpretive facilities for the visually handicapped.

NATURE CENTERS AND TRAILS

ARIZONA

Catalina Desert Trail (Tucson)

Self-guided 1/4 mile trail with Braille signs through picturesque Arizona desert landscape. 4 acres. Operated by the U.S. Forest Service. Open October thru May.

Contact: Sabino Canyon Visitor Center
Santa Catalina Ranger District
Coronado National Forest
Route 15, Box 277-F
Tucson, Arizona 85715

CALIFORNIA

Shady Rest Nature Trail (Mammoth Lakes)

Self-guided 900 foot trail with 11 stations employing tape recorded presentations of natural features in the area. Trail is adjacent to campground for the physically handicapped. 1/4 acre. Operated by the U.S. Forest Service. Open summer season only.

Contact: Mammoth Visitor Center
Mammoth Ranger District
Inyo National Forest
Box 146
Mammoth Lakes, California 93546

Whispering Pines Nature Trail (Mentone)

Self-guided 3600 foot trail with Braille and large print signs. 5 acres. Operated by the U.S. Forest Service. Open all year.

Contact: San Gorgonio Ranger District
San Bernadino National Forest
Route 1, Box 264
Mentone, California 92359

Nature Trail (Muir Woods National Monument)

Self-guided 650 foot trail with Braille signs. Operated by the National Park Service. Open all year.

Contact: Superintendent
Muir Woods National Monument
Mill Valley, California 94941

Revelation Trail. (Orick)

Self-guided 1/4 mile trail through a magnificent California redwood forest. Braille guidebook keyed to the trail is available from park headquarters. Operated by the State of California Department of Parks and Recreation. Open all year.

Contact: Prairie Creek Redwoods State Park
Orick, California 95555

COLORADO

Roaring Fork Nature Trail (Aspen)

Self-guided 1/4 mile trail with Braille and conventional signs through natural surroundings in the White River National Forest about 16 miles from Aspen. 1 acre. Operated by the U.S. Forest Service. Open summer only.

Contact: Aspen Ranger District
White River National Forest
Aspen, Colorado 81611

Genesee Park Braille Trail (Denver)

Self-guided 1/2 mile Braille trail in Genesee Park of the Denver Mountain Park system. 2200 acres. Open summer only.

Contact: Department of Parks and Recreation
City and County of Denver
Room 304, 1445 Cleveland Place
Denver, Colorado 80202

FLORIDA

Trout Pond Recreation Area (Crawfordville)

Interpretive facilities are as yet incomplete, but will incorporate electronic playback recorders as major interpretive devices when completed in September, 1972. 30 acres. Operated by the U.S. Forest Service. Open April thru September. Arrangements may be made for off-season use.

Contact: Apalachicola National Forest
Box 1050
Tallahassee, Florida 32302

GEORGIA

Fernbank Science Center (Atlanta)

1/4 mile Braille trail. Due to physical requirements of the area, the trail is not self-guided, but a staff naturalist is available. Open all year.

Contact: DeKalb County Board of Education
156 Heaton Park Drive, N.E.
Atlanta, Georgia 30307

ILLINOIS

Nature Trail of the Chicago Horticultural Society Botanical Garden (Glencoe)

Self-guided 1/2 mile trail through the botanical garden with Braille and large type print signs explaining various features at 27 stations. Plans for a booklet in Braille keyed to the trail are in progress. Open during summer only. (In winter, open only during weekdays). Facility is relatively new, so visitors are advised to seek up-dated information to assure its present availability.

Contact: Chicago Horticultural Society
Botanical Garden
P.O. Box 90
Glencoe, Illinois 60022

INDIANA

Whispering Woods Nature Trail (New Carlisle)
Self-guided trail through a beautiful Beech-Maple climax forest of the Bendix Woods County Park. Playback recorders are available at the nature center for visitor use along the trail. 3 acres. Open all year.
Contact: St. Joseph County Parks & Recreation Commission
RR #2, Box 72A
New Carlisle, Indiana 46552

IOWA

Handicapped Children's Nature Study Center (Davenport)
4000 foot nature trail guided by staff naturalist. 6 acres. Open September thru June, but a summer program is tentatively set to begin with the 1972 season.
Contact: Outdoor Education Consultant
Handicapped Children's Nature Study Center
1523 S. Fairmount Street
Davenport, Iowa 52802

MASSACHUSETTS

Buttonbush Trail (Eastham)
The 1500 foot self-guided nature trail is operated by the National Park Service at Salt Pond Visitor Center. Braille and conventional print signs interpret its special features. An exhibit of native marine shells is labelled similarly. The trail is available under the Park Service's National Environmental Education Development Program. Open all year.
Contact: Superintendent
Cape Cod National Seashore
South Wellfleet, Massachusetts 02663

Cedar Ridge Nature Trail (Westwood)
Self-guiding nature trail is 1060 feet long with 25 points of interest. Braille and conventional large print signs relay the interpretive message of this natural area 12 miles from Boston. Operated by the Hale Camping Reservation. Open May thru September.
Contact: Hale Camping Reservation
Box 241
Westwood, Massachusetts 02090

Spruce Hill Nature Trail (Westwood)
Self-guided nature trail is located adjacent to the Cedar Ridge Nature Trail (see above). Twelve stations employing Braille and large print signs are located on

the 550 foot trail. Open May thru September.

Contact: Hale Camping Reservation
Box 241
Westwood, Massachusetts, 02090

MICHIGAN

DeWaters Education Center & Touch and See Nature Trail (Flint)

Self-guided nature trail is located in the For-Far Nature Preserve and Arboretum. Length is 1000 feet. Braille and conventional signs are employed. Natural objects (ie. leaves, bark, etc.) are cast in basrelief and provide special interpretive messages. Special programs on various topics are available on request from the staff naturalist. Some subjects available include: 1) Animal Foods, Homes and Signs; 2) Our Living Environment; 3) Pond and Stream Ecology; and 4) Signs of the Present Season. Trail is open Monday thru Friday all year. Interpretive center and trail open Sundays, April 15 thru November 15. Outdoor education programs by staff naturalist available Monday thru Friday all year with appointment.

Contact: Genesee County Parks & Recreation Commission
G-5055 Branch Road
Flint, Michigan 48506

MINNESOTA

Wood Lake Nature Center (Richfield)

900 foot trail employs playback recorders as interpretive devices. Staff naturalist is also available by appointment. Trail is open summer and fall, with field studies conducted by naturalist all year.

Contact: Wood Lake Nature Center
735 Lake Shore Drive
Richfield, Minnesota 55423

MONTANA

Braille Garden and Trail (Great Falls)

Trail through the grounds of the Montana School for the Deaf and Blind employing Braille signs. 3 acres. Open all year

Contact: Montana School for the Deaf and Blind
3911 Central Avenue
Great Falls, Montana 59401

NEW JERSEY

Allaire State Park Braille Trail (Farmingdale)

Self-guided 1/4 mile trail with Braille signing in Allaire State Park. Staff naturalist is available for tours by appointment. Open summer only.

Contact: Allaire State Park
P.O. Box 218
Farmingdale, New Jersey 07727

Sheal Harbor Marine Museum and Nature Trail (Port Monmouth)
Self-guided 1200 foot nature trail in a dune and beach area. Braille signs explain the unique features of the marine environment. Staff naturalists are available for tours of the trail. 2 acres. Museum area is 39 acres. Very intensive program of natural and American colonial history available in the Museum. The Museum contains many artifacts of early American fishing which have been labelled in Braille and conventional print. The entire complex of Museum, trail, and adjacent facilities have incorporated a "touch and see" approach to interpretation. Open Saturday and Sunday afternoons all year. Other times require prior arrangements.

Contact: Middletown Township Historical Society
C/O Miss Gertrude Heidlinger
Studio 57
Leonardo, New Jersey 07737

Trail Side Museum and Nature Science Center (Watchung)
Information unavailable.

Contact: Trail Side Museum and Nature Center
Union County Park Commission
Watchung, New Jersey 07060

NEW MEXICO

La Pasada Encantada (The Enchanted Way) (Cloudcroft)

Self-guided 1200 foot trail labelled by Braille signs. 3 acres. Operated by the U.S. Forest Service. Open summer only, though off-season group use may be arranged.

Contact: Cloudcroft Ranger District
Lincoln National Forest
Cloudcroft, New Mexico 88317

(Sandia Park)

Cienega Canyon Nature Trail for the Physically Handicapped
Self-guided trail 800 feet in length. Braille and conventional signs point out 18 points of interest to the visitor. Trees, shrubs, flowers, and sounds of the forest typical of the Cienega Canyon area are explained. 1 acre. Operated by the U.S. Forest Service. Open all year.

Contact: Cibola National Forest
Box 1326
Albuquerque, New Mexico 87103

NEW YORK

Nature Trail for the Visually Handicapped (Protection)
Self-guided 1800 foot trail labelled with Braille and conventional large print signs. Operated by the Erie County 4-H Club. Open all year.

Contact: Erie County 4-H Center
21 S. Grove Street
East Aurora, New York 14139

NORTH CAROLINA

Nature Science Center/Reynolds Village (Winston-Salem)

Information unavailable.

Contact: Nature Science Center
City of Winston-Salem
Winston-Salem, North Carolina 27106

OHIO

Highbrook Lodge Nature Trails (Chardon)

Two trails are self-guided with Braille signing. Braille guidebooks keyed to the trails are also available. Trails are 1 1/2 and 1/8 miles respectively. Trails are adjacent to camp conducted by the Cleveland Society for the Blind. 42 acres. Special programs which develop better senses of smell, taste, feeling, and hearing are available from staff naturalist by appointment. Open summer only. Off-season use by special arrangement.

Contact: Cleveland Society for the Blind
1909 E. 101st Street
Cleveland, Ohio 44106

Feel of the Forest Braille Trail (Hamitown)

Information unavailable.

Contact. Hamilton County Park District
10245 Winton Road
Cincinnati, Ohio 45231

PENNSYLVANIA

John J. Tyler Arboretum Nature Trail (Lima)

Self-guided 275 foot nature trail through the arboretum uses Braille signs for interpretation. Open all year.

Contact: Director
John J. Tyler Arboretum
515 Painter Road
Box 216
Lima, Pennsylvania 19060

Oerwood Braille Trail (Mt. Wolf)

Self-guided nature trail about 1/2 mile long. Braille signs and staff naturalist explain the features of the woodlands, meadows, and streams at 17 stations. 35 acres. Operated by the Oerwood Nature Association. Open spring, summer, and fall. Nature center open all year.

Contact: Mrs. Anne H. Koval, Director
Oerwood Nature Association
R.D. #1
Mt. Wolf, Pennsylvania 17347

North Park and South Park Nature Trails (Pittsburg)

Two self-guided trails in Boyce Park. Lengths are 1/4 and 1/2 mile respectively. Braille signs are employed. 10 acres. Open all year.

Contact: Allegheny County Department of Parks, Recreation, and Conservation/Boyce Park
675 Oldfrankstow Road
Pittsburg, Pennsylvania 15239

Reading Nature Trail (Reading)

Self-guided 1/2 mile trail with Braille signs operated by the Bureau of Parks, Reading. Staff naturalist is available for tours by appointment. Tape recorder use is anticipated after 1972 season. 10 acres. Open summer only.

Contact: Bureau of Parks and Recreation
City Hall
8th and Washington Streets
Reading, Pennsylvania 19601

SOUTH CAROLINA

Clemson University Ornamental Area (Clemson)

Self-guided tour through the Ornamental Area of Clemson University with Braille labels. 44 acres. Open all year.

Contact: Clemson University
Department of Horticulture
Clemson, South Carolina 29631

Discovery Trail (Barnwell State Park)

Interpretive facilities for the visually handicapped are as yet incomplete. Trail will be 1/4 mile on a land base of 6 acres. Open all year.

Contact: Division of Parks and Recreation
Box 1358
Columbia, South Carolina 29202

TEXAS

Greer Island Nature Center (Fort Worth)

A Braille trail is planned for the nature center, but no completion date is available. Prior inquiries are recommended before visiting. Nature Center is currently available to visitors with staff naturalist on hand. Open all year except holidays.

Contact: Greer Island Nature Center
Route 10, Box 53
Fort Worth, Texas 76135

UTAH

Tribble Fork Reservoir (Provo)

Self-guided trail for all physically handicapped with facilities for fishing available. The 200 foot trail is open during summer only. Operated by the U.S. Forest Service.

Contact: Uinta National Forest
P.O. Box 1428
Provo, Utah 84601

VIRGINIA

Gulf Branch Nature Center (Arlington)

Self-guided 600 foot nature trail. Interpretive devices include braille signs and playback recorders along the trail. Staff interpreter is available for special tours or programs. A nature book in Braille is available at the nature center. 30 acres. Open all year.

Contact: Arlington County Department of Environmental Affairs
Park Division
300 North Park Drive
Arlington, Virginia 22203

Massanutten Visitor Center & The Lion's Tale (Harrisonburg)

Self-guided 1600 foot trail employs Braille and conventional large print signs. Staff naturalist is also available for guided tours of the trail. Tape recorded presentations are used in the Visitor's Center. 10 acres. Discovery Way and the Massanutten Story Trail adjacent to the Visitor Center utilize large block lettering in their signs for partially handicapped visitors. Operated by the U.S. Forest Service. Open April thru November.

Contact: George Washington National Forest
Federal Building
Harrisonburg, Virginia 22801

Trail for the Blind (Petersburg)

Self-guided 800 foot trail is operated by the National Park Service in the Petersburg National Battlefield. Braille signs are the featured interpretive devices along the trail. 1/2 acre. Open all year.

Contact: Superintendent
Petersburg National Battlefield
Box 549
Petersburg, Virginia 23803

WISCONSIN

Gallistel Woods Nature Trail (Madison)

Interpretive facilities for the visually handicapped are still in the planning stages. The existing 1/4 mile trail in Gallistel Woods of the University of Wisconsin Arboretum will be modified and completed by 1973. Use of all types of interpretive devices are tentatively planned. Staff naturalist is currently available. 1250 acres. Open all year.

Contact: Rosemary Fleming
University of Wisconsin Arboretum
1207 Seminole Highway
Madison, Wisconsin 53711

WYOMING

Three Sense Nature Trail (Yellowstone National Park)

Self-guided 900 foot trail is operated by the National Park Service. Braille signs are employed for describing various points of interest along the trail. 2 acres. Open May thru October.

Contact: Superintendent
Yellowstone National Park
Yellowstone National Park, Wyoming 82190

WASHINGTON, D.C.

Touch and See Nature Trail (Washington, D.C.)

Self-guided 1600 foot trail through the National Arboretum. braille signs explain the living environment of the Arboretum at 24 stations. 415 acres. Open all year.

Contact: U.S. National Arboretum
24th & R Streets, N.E.
Washington, D.C. 20002

FRAGRANCE AND BOTANICAL GARDENS

Alabama

Helen Keller Fragrance Garden
Alabama School for the Deaf and Blind
Talladega, Alabama 35160

California

Los Angeles State and County Arboretum
301 N. Baldwin Avenue
Arcadia, California 91008

Garden of Fragrance
Strybing Arboretum and Botanic Garden
9th Avenue & Lincoln Way
San Francisco, California 94122

Colorado

Denver Botanic Garden
909 York Street
Denver, Colorado 80206

Georgia

Callaway Gardens
Pine Mountain, Georgia 31822

Hawaii

Foster Botanic Gardens
50 N. Vineyard Street
Honolulu, Hawaii 96817

Illinois

Morton Arboretum
Lisle, Illinois 60532

Massachusetts

Arnold Arboretum
Jamaica Plain, Massachusetts 02130

Missouri

Missouri Botanical Gardens
2315 Tower Grove Avenue
St. Louis, Missouri 63110

New York

Brooklyn Botanic Garden
1000 Washington Avenue
Brooklyn, New York 11225

New York Botanical Garden
Bronx Park, New York 10458

Planting Fields Arboretum
Oyster Bay, New York 11771

Eastman Park Arboretum
5 Castle Park
Rochester, New York 14620

North Carolina

Asheville-Biltmore Botanical Gardens
Asheville, North Carolina

Sarah P. Duke Memorial Park
Duke University
Durham, North Carolina 27706

Ohio

Mt. Airy Arboretum
Cincinnati Park Board
Cincinnati, Ohio 45202

Kingwood Center
900 Park Avenue W.
Mansfield, Ohio 44906

Holden Arboretum
R.D. #2
Kenton, Ohio 44060

Secrest Arboretum
Ohio State University
Wooster, Ohio 44691

Pennsylvania

Longwood Gardens
Kennett Square, Pennsylvania 19348

Morris Arboretum
University of Pennsylvania
9414 Meadbrook Avenue
Philadelphia, Pennsylvania 19118

Arthur Hoyt Scott Horticultural Foundation
Swarthmore College
Swarthmore, Pennsylvania 19081

Tennessee

Tennessee Botanical Gardens
Cheekwood
Nashville, Tennessee 37205

Texas

Fort Worth Botanic Gardens
3220 Botanic Garden Drive
Fort Worth, Texas 76107

Virginia

Fragrance and Texture Garden
Norfolk Botanical Garden
Airport Road
Norfolk, Virginia 23518

Washington

University of Washington Arboretum
Seattle, Washington 98105

Wisconsin

Alfred Boerner Botanical Garden
Route 3, Box 23
Hales Corner, Wisconsin 53130

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PROJECT ON

[redacted]

AMERICAN ASSOCIATION FOR HEALTH PHYSICAL EDUCATION AND RECREATION

Challenge

VOLUME 7 NUMBER 5 MAY-JUNE 1972

AT WESTERN CAROLINA CENTER—

OPERATION CHALLENGE

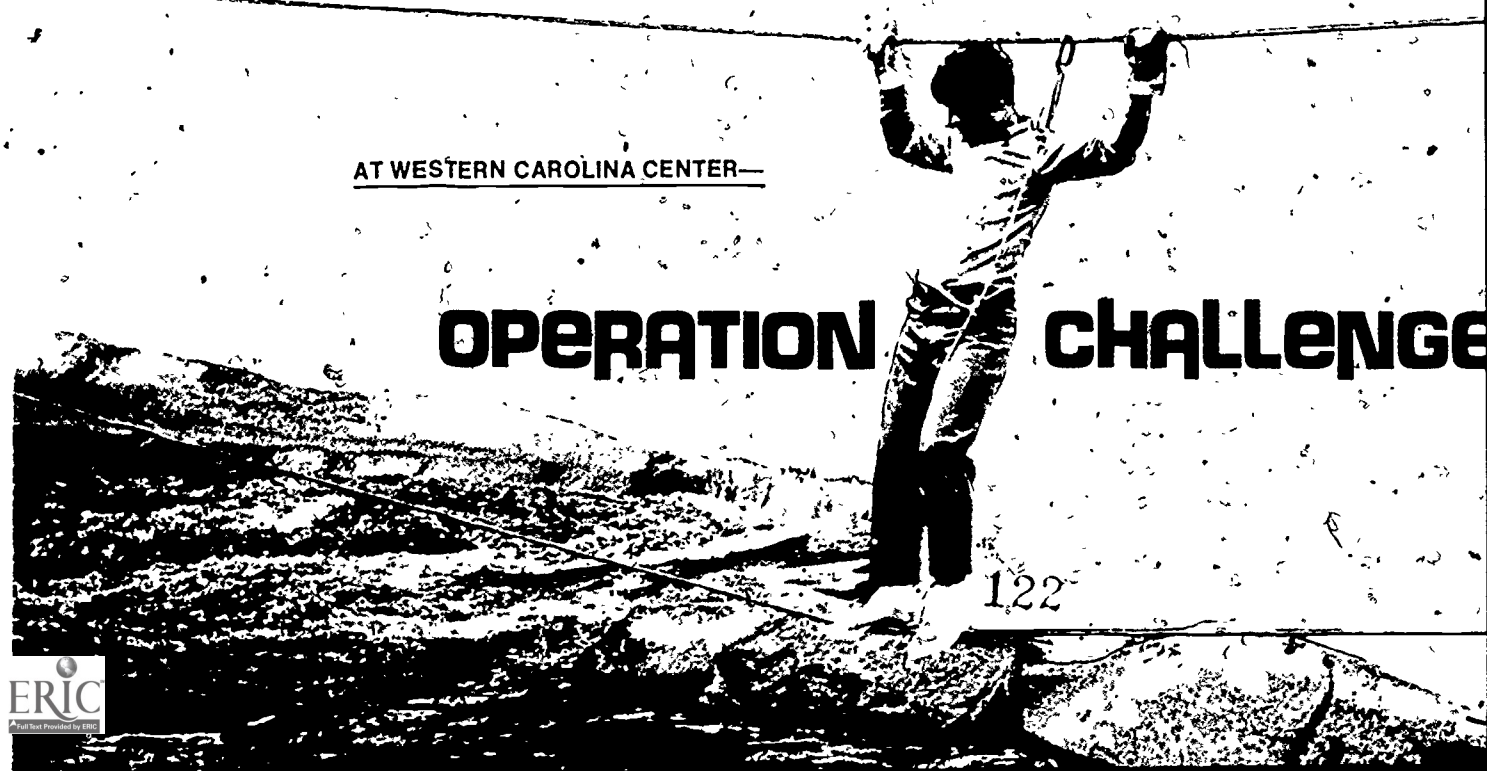
A UNIT OF GREEN BERETS from Ft. Bragg and a group of children from Western Carolina Center (Morgantown), one of North Carolina's four state facilities for mentally retarded, discovered they could learn a lot from each other as they joined together in a Special Forces Civic Action program last October. *Operation Challenge* consisted of four four-day outdoor training programs for 88 youngsters from the Center. It was conducted by a Green Beret team from the 5th Special Forces Group, John F. Kennedy Center for Military Assistance, Ft. Bragg.

Special Forces units have trained in the Pisgah National Forest area near Morgantown for a number of years and children from the Center have previously been involved in some of their activities on a one-day basis. The superintendent of Western Carolina Center felt these men had a great deal of expertise to offer that would benefit mentally retarded and handicapped children, particularly in the area of physical training and activity. He approached the commanding general of the JFK Center about participating in a Special Forces Civic action program. Civic action programs are aimed at helping the civilian community by using the unique abilities and training of the Special Forces personnel and are very much a part of Special Forces activities. (Special Forces units have been active in a variety of projects in several parts of North Carolina including assisting with a summer camp for boys, providing medical assistance in rural areas, giving instructions in various specialties, and providing manpower in emergency and disaster situations.)

Would not some of the children at the Center benefit from physical training and activity similar to actual Green Beret training activities? Such a program could be very effective in giving them a chance to develop a sense of self-confidence and accomplishment. The idea was approved and preparations began for arrival of the famed Green Berets at Western Carolina Center.

An eleven-man team of enlisted men conducted the four training cycles with 22 youngsters participating in each. The first two groups were mildly and moderately retarded young boys, the third a group of young girls, and the fourth more severely handicapped boys, all ranging in age between 8 and 15. The program was designed to provide youngsters with physical training and fitness survival training activities and to build their self-confidence and physical ability. It was the first time members of this Green Beret unit had worked with handicapped children and it proved to be a worthwhile training session for all involved. At the close of each cycle the youthful participants were ready to go back for more.

Each of the four days of the cycle began bright and early at Western Carolina Center as the 22 recruits turned out for physical exercises with the troops.



OPERATION CHALLENGE

Then it was forward march as the excited crew headed for the bus which took them to the training site in the Brown Mountain Beach section of the Pisgah National Forest about 20 miles from the Center.

Physical training, basic first aid ranging from artificial respiration to protecting wounds and cuts, instruction in survival, gathering food, cooking, making a shelter, navigating, making rope knots, and hiking made up a full four-day schedule. Recruits also were taught how to make rope bridges to cross a stream and enjoyed the thrill of doing it at Wilson Creek. A tired but enthusiastic bunch returned to the Center each evening, looking forward to the next day's activities.

A highlight of the program for these mini-berets was learning to rappel—come down a rock cliff on a rope support. Youngsters began the rappel exercise by learning the technique on a 30-foot drop under the expert instruction and watchful eye of the Green Berets: many graduated to a 70-foot elevation. These men in individual contact with the children were able to give them the confidence and ability to try new tasks and experiences. Once a youngster found he could jump the first hurdle he was ready for the next.

The kids and their Green Beret mentors camped overnight in the Brown Mountain Beach area on the third night of each cycle and put some of their survival training into practice as they built shelters and cooked their own meals. On the fourth and final day activity moved to a boat dock on a lake where the kids experienced amphibian training, learning the use of a riverboat which holds 15 people. Then it was back to the mountain site where the youthful enthusiasts got their graduation certificates. Each participant received a Special Forces shirt and the honor graduate of each cycle now wears a cherished green beret.

Although the four cycles are over and the Green Berets have gone, their spirit lingers at the Center. Kids who participated in the program will relive their experiences for years to come and there is no way to measure the benefits they have derived. As Max Hemphill, recreation director at Western Carolina Center who coordinated the program put it, "It was a wonderful experience for these kids. With the help of the Green Berets, they have gained confidence in their ability and have greatly improved their self-image." It takes a special person to be able to give these children such confidence and pride in themselves.

"These men are really *special forces* who can help meet the needs of handicapped children," stated J. Iverson Riddle, Western Carolina Center's superintendent. "The close contact on an individual basis with these men is a wonderful opportunity and a growing experience for these children. We are grateful for the participation and excellent cooperation of the Special Forces."

The youngsters are not the only ones who benefited from the program. "It's good training for the team as well as the kids," commented Lt. Leonard McCook who headed the operation. "It gives us a chance to use our teaching methods on young, inexperienced people. We really have to overcome a language barrier and learn to talk to these kids on their level. It also teaches us to communicate without language to many of the youngsters."

When asked how he felt about the program one Green Beret put it this way, "It's a great feeling to watch these kids build up confidence as they overcome each objective we give them—rappelling down the cliff, crossing the rope bridge, helping build a shelter. They're just amazed at what they can do once they try."

Reprinted from Challenge (May/June 1972).

PRAYER OF THE WOODS

Taken from Camp Confidence's Sylvan Trail.

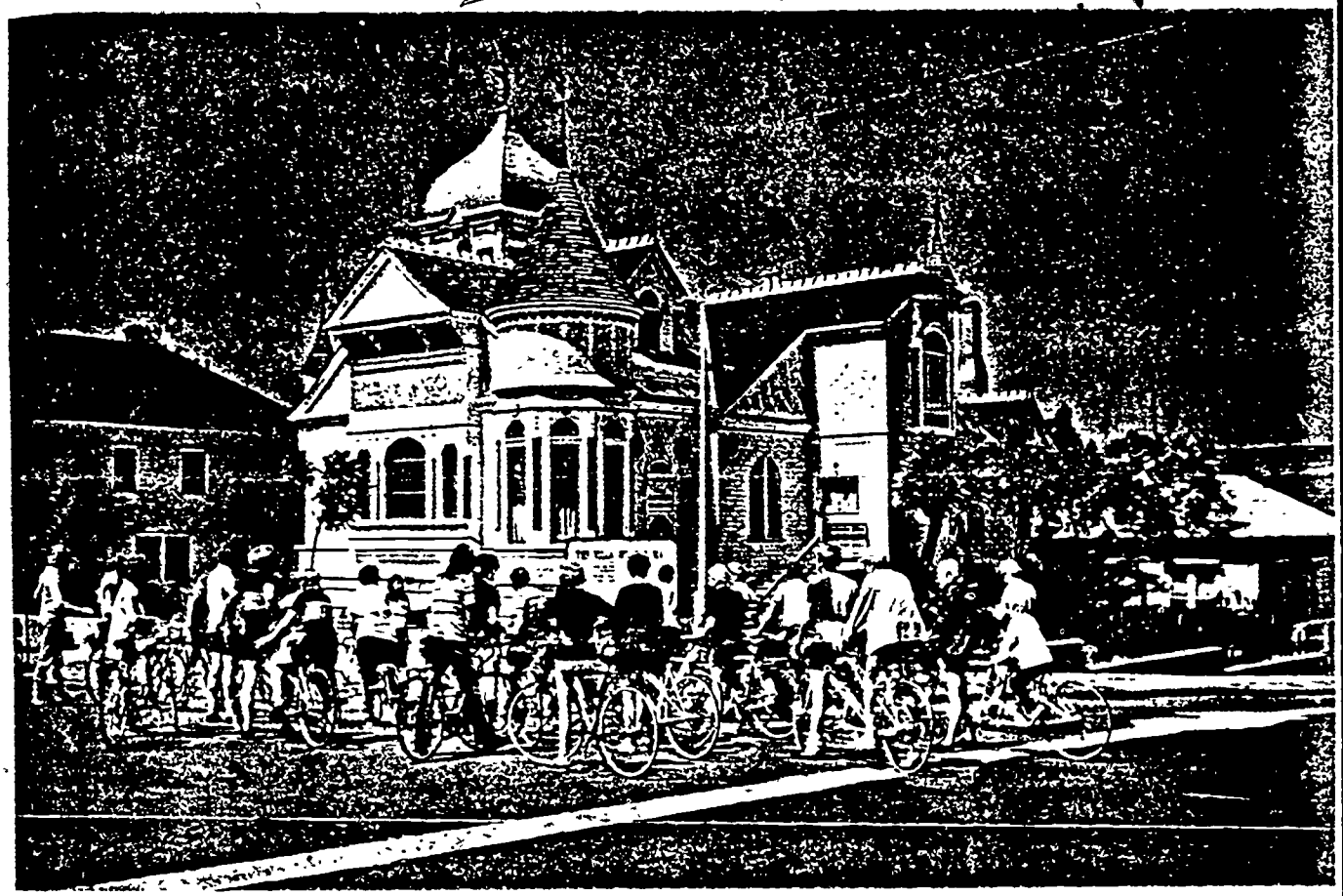
I am the heat of your hearth on the cold winter nights,
the friendly shade screening you from the summer sun,
and my fruits are refreshing draughts
quenching your thirst as you journey on.

I am the beam that holds your house,
the board of your table, the bed on which you lie,
and the timber that builds your boat.

I am the handle of your hoe,
the door of your homestead, the wood of your cradle,
the shell of your coffin.

I am the bread of kindness and the floor of beauty.
Ye who pass by, listen to my prayer: harm me not.

SIGHTRIDERS



a club program for the visually handicapped

by CARL and JO STAHNKE

Above: *The Knickerbikers of San Diego County at Villa Montezuma, a restored house in San Diego. It's impossible to tell who's a Sightrider.*

The tandems glide down the road. Both riders are pedaling easily, their feet connected by the force of a common goal. Up and down hills, around curves and through traffic, the tandems function smoothly with the other cyclists in the group. Conversation flows back and forth among the riders.

To the casual observer this looks like another group of fun-loving cyclists from the Knickerbikers of San Diego County It is that, but much more. Part of this active club's membership is the Sightriders: tandem teams formed within the club. The Sightriders are visually handicapped and blind cyclists who are teamed on a tandem with a sighted rider. They ride to enjoy the fun, health and exhilaration of cycling.

Activities of the Sightriders are identical to regular club rides. There are no special rides for the blind. This is a strength of the program. Since the start the Sightriders' tandem teams have ridden on club rides from 10 to 50 miles; "O' Happy Bellye Rides" (brunch rides), tours along the Southern California coast, lunch-shopping tours to Mexico and rides into the hills of San Diego County for local festivals and happenings.

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Three visually handicapped persons have joined the Knickerbikers and are on their way to becoming full-fledged bikies. These three cyclists give some insight into the motivation of blind persons.

Betty Saylor is very active. She walks a great deal, had bicycled before losing her vision, and is directing a swimming program for the blind. Her main reason for cycling is physical exercise. She heard about the Sightriders and liked the idea of getting out on a bicycle. Betty has ridden with a variety of captains and has a great deal of cycling confidence. The only continuing problem she has is getting her feet into the toe clips.

Michael Young is another Sightrider who has joined the Knickerbikers. As a practicing psychologist for the blind, he knows the problems of sightlessness from many angles. He is proud of the fact that he jogged as a marine for 20 years before it became the "in" thing.

Young considers blindness a challenge. Short of driving a car, he says there is nothing a blind person can't do. He had a short period of adjustment when he started cycling, since it had been 40 years since he had last ridden a bike. Confidence came quickly, though, and he has become an avid cyclist. Young points out that the philosophy of the club made his adjustment to cycling easy. The idea of having fun permeates Knickerbiker activities, and there is no club rule against stopping and taking a breather on a long steep hill to enjoy the scenery and visit with friends.

The third Sightrider to officially become a club member is Art Durson. Art is visually handicapped and is gradually losing his vision. He had a 10-speed bike before and was contemplating buying a tandem so his friends could ride with him. He felt it was too dangerous for him to ride his single with failing vision. While on a Sierra Club hike, he asked the guide who was a cyclist if she knew anything about tandems. She put him in touch with the Knickerbikers, and he soon became a member.

Art cycles for the exercise. He points out that fitness is a real problem for many blind people, and a lack of fitness often leads to other medical problems. Art also mentions toe clips as a problem. Sometimes his foot mashes the clip down.

The Knickerbikers is strictly a touring club and has no competitive activities. The idea of involving the visually handicapped in cycling was introduced to the club by its president, Harmon Harris. Harris had seen handicapped riders on other clubs' rides, heard about attempts to involve blind persons and decided to give it a try.

Other club members responded enthusiastically when Harris polled them. Hi s to include these noncyclists

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totally in the Knickerbiker program. It was not a "Let's take a blind person for a ride" type of thing. Instead, he envisioned total involvement in cycle touring. The nonsighted cyclist would be able to develop his cycling skills to the fullest and really enjoy the benefits of cycling.

Within six weeks of sending out a bulletin explaining the plan to the 300 club members, $2,300 had been raised. Several purchased tandems outright for the club. Harris bought 10 Gitane tandems from Gitane Pacific of Hawthorne, California, who had agreed to supply the tandems on a one-time basis at a substantial discount. The Gitane was chosen because of the blend of workmanship, good components and reasonable price.

The Gitane chosen is the Tandem Sport model. It weighs about 50 pounds. Some models arrived with Huret equipment and some had Sun Tour. The front has drop handlebars, and the rear bar is the sport type. Saddles are leather-covered plastic. The cranks are cottered steel. Chainwheels have 52 and 36 teeth. The freewheel is 32, 26, 21, 17 and 14 teeth. This model has metal fenders and front and rear luggage racks. Braking is provided by Mafac cantilever brakes and an internal hub brake on the rear.

One unique aspect of the club plan was to issue a tandem to an interested club member on a semi-permanent basis. The tandem would be that person's responsibility to maintain and transport to club rides. This eliminated a problem that has plagued other tandem programs – transporting several large, awkward tandems to the starting point. Having the tandem in his possession also allows the tandem captain to ride with his family and friends. This incentive helps in two ways. First, it's fun to have a tandem available for family rides. Second, the tandem captain gains valuable experience and confidence handling the bike.

A further responsibility of the tandem captain is to pick up his Sightrider at home and return him home after the ride. This contact increases the bond of friendship and trust between the riders and makes the cycling even more rewarding.

Our first contact with the blind was through the Blind Recreation Center in San Diego. From that several interested people went on a ride. They varied in age and sex but had some common qualities. The most outstanding commonalty was a desire to remain physically active. The participants who found cycling most enjoyable had attempted to maintain their physical profile through jogging, swimming, softball, hiking and basketball. The chance to include cycling in their activities was readily accepted.

Involving blind persons in cycling is a challenge. At first the club thought teenagers would be anxious to get into the sport. This has not happened. In many cases parents of these youngsters were concerned about safety. Frequently, parents had other activities planned for the weekend. As a result, most blind participants have been adults. Even then some hesitate to become cyclists. Cycling actively is difficult for many who need a slow, gradual conditioning program.

To get on the back of a tandem with a stranger on the front is not easy. Trust is necessary. To do it when blind takes a great amount of courage and trust. This is one reason the Knickerbikers use tandeming to build a partnership between the riders. Developing a bond of trust and friendship through cycling that goes beyond cycling is the goal.

The desire to match partners is a challenge that sometimes gets complicated. Because of the large size of San Diego County, an attempt to match riders gebographically has been made. This limits the driving required by the tandem captain.

As much as possible physical strength is matched. While a tandem does even out some physical differences, a strong, relatively solid rider on the front is an advantage. A strong rider can tow along a weak rider for a while, but over the long ride and for cycle tours this can be discouraging. Emotional compatability is important. This requires tact and an understanding of human nature.

It's important for the tandem captain to be comfortable with the responsibility of picking up the blind person, transporting him to the ride, riding with him and being company, and then taking him home. Some potential tandem captains discovered they were not willing to take on such responsibility. They rode as a means to freedom and felt encumbered with a tandem. This sort of self-knowledge and frankness has enabled the club to shift tandems around without any ill feeling. There is no stigma attached to not wanting to be involved in that way. As Harris points out, "When it's not fun any more, it's time to let someone else have the tandem."

Participation in the Sightriders has been a learning experience for all. Club members comment that they, the sighted, have learned the most. Some similarities among cycling problems and the problems of the blind are striking. Both experience apathy and carelessness from motorists at night. Blind people have

Starting your own Sightrider program -

If your club is interested in starting a similar activity, there are some lessons to be learned from the Knickerbiker experience. These suggestions reflect how one club got going. It's important to tailor any program to fit the needs of the members. As with many things, there is no one and only way to go.

Club Interest

Club interest is obviously vital. The membership must be willing to accept the financial responsibility and the inclusion of new members cheerfully. To do otherwise is unfair, dishonest, and will be quickly sensed by the visually handicapped, who will withdraw their support.

Financial Support

Tandems are expensive: The cheapest good tandem costs about $300. The price goes up rapidly. Aside from initial cost, maintenance and bike modifications cost. If your club is lucky, maintenance may be done by club members.

Start Cheap

Within reason, it's best to start as inexpensively as possible. The Knickerbikers look at their tandems as something to be used up. While the bikes are well cared for by the members, they're not enshrined as if they were $1,500 custom tandems. They were purchased to be ridden This attitude would probably not prevail if the bikes were more expensive.

Care of the Tandems

The Knickerbikers suggest issuing the tandems to club members. This spreads out the responsibility for the bikes, gives the captain a chance to ride with his family as well as maintain the bike.

Rider Training

If your club has strong, willing riders without tandem experience, it's important to give them a chance to build up confidence before taking on a Sightrider. Practice sessions with experienced tandem captains are necessary as confidence builders.

Modifying the Tandems

The Knickerbikers found that purchasing an inexpensive tandem brought with it some problems. Some of the derailleurs weren't what the riders wanted. These were changed, usually to Sun Tour wide-range devices. All of the tandems had rock-hard plastic seats. For the beginning rider, or anyone else, this area of rider comfort is crucial. Some tandem captains have shifted their well-broken-in saddles to the tandems. Another modification has been the installation of quick-release devices on the rear seat and rear handlebars. This permits easy, quick adjustments when changing riders. A final modification has been to attach bungee cords between the pedals. This keeps the pedals horizontal and easier to get into.

Finding Visually Handicapped Riders

Community agencies should be able to give the names of organizations of visually handicapped persons. Local youth groups such as Scouts and boys' and girls' clubs might also be useful. Once things get going, word-of-mouth advertising is most effective. Having a good time and telling others about it is how many people get into cycling anyway.

Flexibility

The Knickerbikers stress flexibility The whole thing is supposed to be fun. Be ready to adapt and change to fit the needs of the people involved

commented about many near misses as they try to cross intersections at night

Another learning experience has been the social interaction between the blind and the sighted. Many handicapped persons in our society have not participated in certain activities. By associating on a truly equal basis through cycling, all Sightrider participants have come to know each other as individuals There is no patronizing, no awkwardness, just cycling fun.

The blind have also taught the sighted the wide spread of attitudes among the blind. Reduced to its simplest level, there are the progressive blind and the rest. The progressive blind, exemplified by the Sightriders, are able physically and willing to get involved in as many different things as possible. They stress independence. They are proud of their active life and enjoy doing things. There is an interesting one-upmanship among some Sightriders. They might report to another member they just finished another 30 miler. This, of course, is part of the fun of cycling: achieving tangible goals that once seemed impossible.

One of the greatest benefits to the Knickerbikers has been getting to meet and know handicapped people on a one-to-one basis. We have had a chance to meet the Sightriders as fully participating members of society and not as "them."

As with any experience, there have been some problems. To expect none would be unrealistic. The financial angle

Dennis Johnson and Art Durson tour the waterfront. The fresh outdoors appeals to all types of cyclists.

was easily dealt with. Instead, people considerations have been the main area of concern.

One continuing shuffle has been the proper matching among the participants. Some potential tandem captains found they didn't like the responsibility or didn't have the experience to handle a tandem. One rider commented that she was constantly aware of the responsibility and potential danger and that she wasn't able to relax and enjoy herself. That awareness forced her to withdraw temporarily until she was able to get some more experience riding tandems.

There have been some shifts among the teams in a desire to come up with the optimum balance. The goal, as Harris perceives it, is to have the team develop friendships so that the tandem will just be the means of two friends getting together to have some companionship and good fun.

There have been some minor hassles about "dog sitting" and other such things, but these are easily cared for. Upon hearing a description of a Bugger, the trailer designed for bicycles, one Sightrider started wondering about the possibility of taking her Seeing-Eye dog along. Who knows, this might happen.

Getting eager blind riders has been somewhat of a problem. Word-of-mouth advertising seems to be working best for the Knickerbikers. There is no better testimonial than listening to a converted bikie.

From the experience of the Knickerbikers of San Diego County, there is a lot to be gained by having such an activity. The benefits to the sighted and the blind are mutual. The fun of cycling provides a bond of shared experience that goes far beyond any physical differences. The joy of friendship and good times should make a Sightrider program for your club worth considering.

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By LOIS TIMNICK
Globe-Democrat Medical Writer

Fifteen years ago a blood vessel broke in Norton Sanders' brain, and St. Louis doctors told him he'd never walk again.

He lost the use of his left side and also lost his wife and his wholesale toy business, but not his gumption or sense of humor — two qualities that turned out to be just as important as the medical miracle that never happened.

TODAY SANDERS, now 57, drives his own car, works part-time as sales promotion and public relations man for Navy Brand Manufacturing Co., lives in his own apartment in a senior citizens' complex "full of nice little old ladies who are convinced that gefilte fish can fix a stroke," belongs to a singles' club where he recently won a dance contest, and does volunteer work with other "handicapped" persons.

His favorite hobby is fishing, so it's sviological that much of his volunteer work consists of teaching those who have the use of only one hand how to fish—fly-fishing by letting out the line with his teeth, spin-casting with an assist from a special harness.

"All I wanted," he said, puffing on his pipe and recalling the long struggle toward a nearly normal life, "was for somebody to give me one finger on the bat. If one person would tell me I had some chance for recovery, I'd take that chance."

THAT SOMEBODY was former St. Louisan Dr. Howard Rusk, of the Institute of Physical Medicine and Rehabilitation in New York City. Sanders had just come out of a month-long coma when he read in a newspaper that Joseph Kennedy, President Kennedy's father, was being treated by Rusk.

"I decided if I wasn't gonna walk again I wanted to hear it from the guy who took care of old Joe Kennedy."

Sanders flew to New York, alone, where physical and psychological therapy started him on the road back, and he continued in therapy programs here at Jewish and St Louis County hopsitals.

Still semiparalyzed, he has regained partial hearing in his left ear, and although he cannot really use his left arm or leg, he is able to move, lift or drag them along. Only Sanders' motor functions, not his thinking or speech processes, were affected.

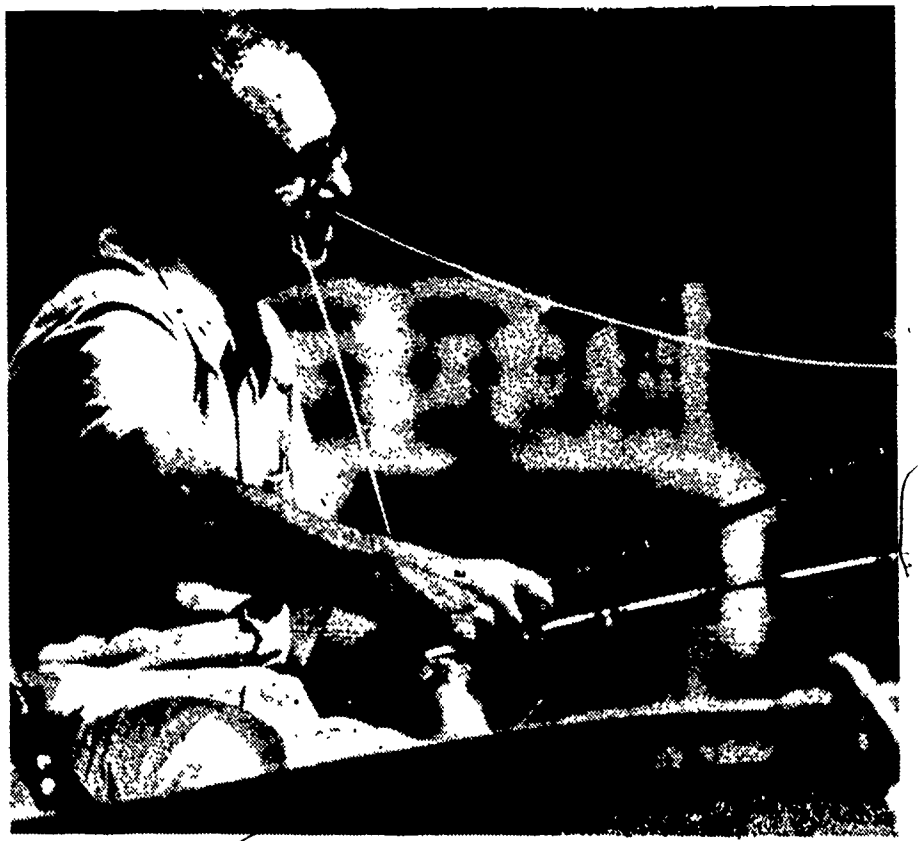
Now, eager to encourage other disabled and depressed victims of strokes, arthritis and multiple sclerosis, he talks to groups, answers letters, writes sports articles and recently made a movie for Southern Illinois University-Carbondale aimed at motivating patients in rehabilitation centers across the United States.

Sanders calls his affliction a "fun stroke" that's gained him friends and strengthened his ability to communicate with people. He jokes that it gets him through grocery and movie lines "real quick."

HE EVEN VIEWS the divorce that followed his stroke in a positive light: "Living alone taught me to do many of the things I may never have learned to do otherwise, like shopping and cooking and dressing myself."

Though convinced that life gives back no more than you put into it, he insistes he's not a special case and is quick to credit the doctors who motivated him and the employers who were willing to give him a chance (Alfred Richter and Sanford Lebman head the maintenance chemical and cleaning supply firm that hired him).

"I had my stroke early, I tell people, to get it over with. I had to learn to take what I had left and start over. To give life a gung-ho try."



Norton Sanders lets out line with teeth while fly fishing.
—Globe-Deocrat Photo by John Dengler