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ABSTRACT

This paper deals with managing a crisis in a wilderness situation. The terms "crisis" and "turning point" are used to describe what is more traditionally called an accident. Using these terms introduces the idea that crisis events occur as logical consequences of preceding decisions, errors, or omissions, not as the result of chance or fate. Ignoring the causes of risk and injury is a serious shortcoming in adventure education and planning. In order to prevent or deal with wilderness crises, three areas of expertise are required: (1) knowledge and skills; (2) preventive awareness; and (3) crisis management planning. Together these three areas form the wilderness crisis management triangle. Crisis management simulation is recommended for participants in a group wilderness activity. The paper describes a six-part crisis resolution plan for training and simulation purposes. The plan considers decision making, search, rescue, first aid, evacuation, and notification. Making plans for these contingencies and weighing the individual's profile of competencies against the wilderness crisis management triangle is an obligation of a prudent adventurer or outdoor practitioner. (ALL)

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WILDERNESS CRISIS MANAGEMENT

by James Raffan

There are two kinds of risk in outdoor adventure activities: "Actual" and "Perceived". Actual Risk depends on the type of activity and the place in which it is being conducted; it also depends on the leaders, the clients and the social environment surrounding the activity. Perceived Risk lives in the minds of participants who lack the technical knowledge and expertise to see and to appreciate actual risk. Perceived Risk can be important to people who use adventure for learning, the idea often being to maximize Perceived Risk and minimize Real Risk. However, when the term "risk" is used in this paper, it refers to Actual Risk.

"Accident" is an unsatisfactory word: it implies that damage to persons or property was caused by fate or chance, and certainly by forces beyond human control. A better word to describe untoward events on the trail is "crisis," a "turning point". The effect of making this distinction is that one begins to look at so-called "accidents," not as acts of fate, but as logical consequences of preceding decisions, errors, or omissions.

A useful tool for looking at the causes of crises is the one-armed bandit. Every time a bad decision is made, every time a contributory factor is overlooked or acted upon incorrectly, a lemon - (CHING!) - appears in one of the little windows. When the requisite number of lemons appears on the machine, your trip hits the jackpot - a crisis occurs. This image translates the quest for safe practice into a simple game of recognizing lemons. The advantage of this way of looking at risk and risk management is in the changes in attitude it breeds. First, in the back of one's mind is the notion of "stake", i.e. what could be lost in an expedition gamble. This makes one focus attention on the persons and property whose existence could hang in the balance when a crisis occurs. Secondly, with the wheels always spinning, a lemon could crop up at any time. Safety and crisis prevention therefore becomes an all-day, all-night concern, and it becomes a way of life, an attitude.

Ignoring the causes of risk and injury is a serious shortcoming of adventure education and planning. In an advertisement for a Wilderness EMT course, nothing

was said about the circumstances that might create a need for the extensive knowledge, or about prevention of these circumstances. Bert Horwood, an outdoor teacher trainer at Queen's University in Kingston, Ontario, sums up the problem this way: "I refuse to consider a first aid kit to be part of safety equipment. It is the thing to which I appeal when safety has failed." This comment highlights the idea that there is more to planning for safe practice than just learning the contents and use of a first aid kit.

I suggest there are three areas of expertise required in order to prevent or deal with wilderness crises:

- 1) Knowledge and skills for safe planning and decision making in the field.
- 2) Preventive Awareness - knowing what dimensions of risk exist in all chosen activities.
- 3) Crisis Management Planning ability.

Together these form the Wilderness Crisis Management Triangle.



KNOWLEDGE AND SKILL

The knowledge and skill component of the crisis management triangle has, historically, been the one to which most attention is paid. It includes expertise and practice in the technical competencies of the activity, be it rock climbing, ice climbing, ballooning, canoeing, or trekking with disabled people.

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For professional guides, teachers and leaders, the line between what one SHOULD know and what one DOES know in the knowledge and skill area has been faint - until the age of accountability. The Association for Experiential Education, based in Boulder, Colorado, published a work called Common Peer Practices in Adventure Programming. This is an excellent reference card to hold against one's own practice - privately or publicly - to determine the extent to which the knowledge and skill arm of the wilderness crisis management triangle has been covered.

PREVENTIVE AWARENESS

Developing an attitude of preventive awareness involves learning to recognize lemons - situations or decisions or people that could contribute to a crisis. There are obvious questions that one can ask before and during a trip to determine the presence of lemons.

BEFORE: Type of route, group size required for safety, access and egress points for every leg of the trip, particular dangers of the route, skills required, communication with the outside world, peculiarities of weather, personnel and how personalities or physical conditioning might affect the dynamics of the expedition.

DURING: Current condition of the group and equipment. Considering the weather and previous progress, are there changes that should be made in scheduling? Must a physical or psychological malaise alter the expedition in some way? Does the pace suit the overall condition of the group?

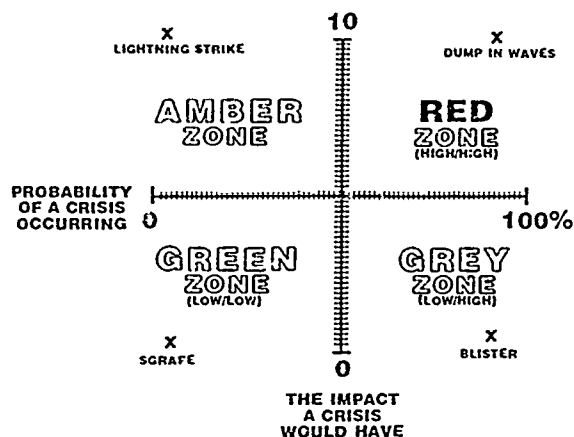
Human lemons are caused by the attitudes, behaviour, and knowledge of the participants, the leader, and of the group as a whole. However, the actions or omissions of supervisors, directors, and others in the background can cause serious lemons to come up too.

Preventive awareness therefore is a process of systematically looking for lemons, postulating "what if..?", and second-guessing. Also, from the legal standpoint, it can provide convincing evidence of prudent, professional practice if it is documented properly. (e.g. developing a comprehensive list of questions that are discussed and acted upon by all leaders in an organization, before any expedition is undertaken.)

In "Crisis Management: Planning for the Inevitable", Steven Fink, suggests a graphical way to evaluate the severity of a particular combination of lemons, and to plan for possible crises. The horizontal axis, from 0 to 100%, is used to plot the probability that something (e.g. a broken ankle from a slip on a mountain trail) will happen. Quantified data from a database of reported injuries and close calls is available from the National Safety Network, P.O. Box 186, Bellefontaine, Ohio 43311, (less than \$10 US for agencies and more for non-

members.) It gives actual values for the likelihood of various types of crises occurring. The vertical axis, from 0 to an arbitrary top value of 10, is used to indicate the impact that a particular crisis would have on the expedition or outing. This allows possible combinations of lemons to be categorized by seriousness as green, amber, grey, or red, and to be managed or prevented by proaction.

CRISIS BAROMETER

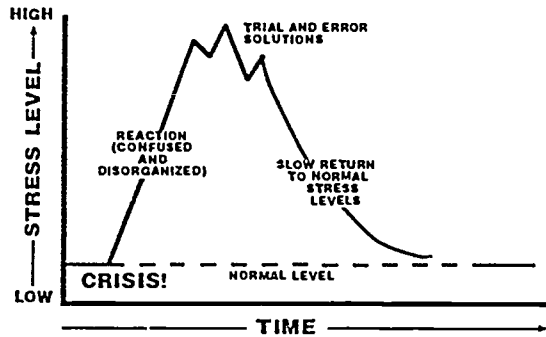


CRISIS MANAGEMENT PLANNING

The third arm of the crisis management triangle is knowing what to do when a crisis occurs - crisis management planning. It is unlikely that any outdoor adventurer will live out his or her life without encountering a situation in which someone's life hangs in the balance. Risk is an important part of outdoor adventuring. Bert Horwood writes (Anee 16(3), p 17) "It is not possible to obtain the benefits of outdoor education (adventuring) without putting staff and students at some risk". It makes sense, then, to be as safe and as preventively aware as humanly possible, but it also is prudent - and realistic - to accept the fact that crises occur. To help understand what happens to us as a crisis progresses, we can plot a "Crisis Profile" graph. Stress (as an indicator of severity) is plotted against time. The stress felt by people involved in the crisis is manifested emotionally (fear, panic, rage), behaviourally (trouble with a task that is usually done with ease), and physiologically (tears, vomiting, anxiety, fainting).

A typical initial reaction to a turning point (crisis) on an expedition is confusion. Just when clear thinking is needed, untrained people (and even trained responders in some cases) are in a state of emotional turmoil that inhibits effective decision making. The result is time wasted, and deterioration of the situation. Researchers who have examined people in crisis think that this initial confusion stage is due to a reactionary process of denial, a refusal to believe that "this is happening to me."

PROFILE OF A CRISIS

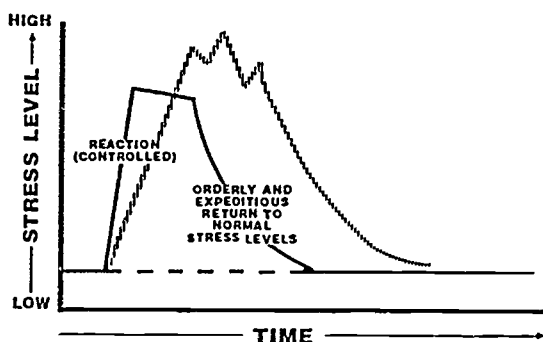


This profile shows the dramatic rise in stress levels with the onset of a crisis, the inefficient trial-and-error solutions that only temporarily lower stress levels, and the slow return of stress to normal levels. Realizing that this is the intrinsic pattern of human response to crisis, there is probably nothing that can be done to entirely change the pattern. However, research has shown that this profile can be modified in four beneficial ways by Preventive Awareness and Training:

- 1) Preventive awareness and training ensure that stress levels stay within acceptable ranges, never spiking in a crisis.
- 2) Preventive awareness and training speed reaction time, because if the scenario has already been examined, less time will be spent in the blindness of denial when it does happen.
- 3) Preventive awareness and training reduce the number of trial-and-error solutions to problems because effective solutions to simulated crises were worked out in advance.
- 4) Preventive awareness and training reduce the amount of time needed to get things back to normal stress levels.

Under ideal conditions, taking into account the above four modifications to the progress of the crisis, a new graph, the "Profile of a Managed Crisis" can be drawn.

PROFILE OF A MANAGED CRISIS



The actual mechanisms for particular individuals and groups to change their expected crisis profile from a chaotic unmanaged scenario to an orderly, managed situation will vary. Also, the way a particular crisis unfolds depends on human and environmental circumstances, level of readiness, quality of leadership, available equipment, type of activity, location and other factors. In any case one can only hope that responses under stress will be appropriate.

Simulation research supports the contention that thinking through, or better yet, acting through, scenarios, will prepare simulation participants for the real thing. It's as if simulation provides a psychological inoculation; just as vaccinations give a simulated and mild case of a disease to build resistance to the real thing. Resolving crises on paper, or under simulated conditions in the field, gives protection against the stress of actually hitting the jackpot when the lemons inadvertently line up to cause disaster.

For training and simulation purposes, a six-part generic crisis resolution plan has proved to be extremely useful.

SIX STEPS FOR ORDERLY CRISIS RESOLUTION

The worst case scenario is this: we can be lost, trapped, injured and in need of quick removal to professional medical care. Included in this worst-case scenario is the possibility of a group becoming metaphorically "lost" in internal conflict in a way that leads to a crisis. The generic crisis resolution system works for all of these possibilities.

The six areas where plans are needed for effective wilderness crisis management are these:

- 1) Decision Making Plan - to allow the group to recognize problems and to make quick effective decisions under stressful conditions.
- 2) Search Plan - to locate lost group members.
- 3) Rescue Plan - to remove a victim from a lifethreatening situation or to get aid to a trapped victim.
- 4) First Aid Plan - to protect the aid giver from harm, to treat a victim for injuries and to protect everyone from further harm.
- 5) Evacuation Plan - to enable an expedition to get an injured person to hospital as quickly and cost effectively as possible.
- 6) Notification Plan - to make sure that all necessary documentation is done to standards acceptable to the jurisdiction in which the crisis occurred, to make sure information gets to all the right people, at the right time and in the right order, and to make sure that people learn from the event.

Each one of these plans could be, and should be, the subject of organized lengthy planning sessions for any

particular group or organization. Making such plans is not easy, but there is an abundance of information available on their technical aspects. A particular crisis may require only one plan to resolve it efficiently, but a more complicated crisis may require all six plans. This six plan system should be worked through on paper, through discussions, or using real-life simulations. Then, when an actual crisis occurs, it will be resolved through decisions that are made with well established mental pathways.

The obligation of a prudent adventurer or outdoor practitioner is to weigh his or her own profile of competencies against the wilderness crisis management triangle, and to take the necessary steps to make sure that the personal triangle and that of the group or organization is complete. When that is done, then we can all focus on what really matters in wilderness adventuring - the experience itself!

(James Raffan is a member of the Outdoor and Experiential Education Unit at Queens University Faculty of Education.)

REFERENCES

Fink, Stephen. "Crisis Management: Planning for the Inevitable". American Management Association, 135 West 50th Street, New York, N.Y. 10020, 1986.

Horwood, Bert. "Good Luck, Bad Luck: Being Systematic About Safety." *Anee* (Council of Outdoor Educators of Ontario) 16(3), pp 17-19.

Johanson, Karl (editor). "Common Peer Practices in Adventure Programming." Association for Experiential Education, Box 249, University of Colorado, Boulder, CO 80309, 1984.

Ewert, Alan and Timothy Boone. "Risk Management: Defusing the Dragon." *Journal of Experiential Education* 10(3), 1987, pp 4-10. (Note: The Fall 1984 issue 7(3) of JEE is entirely devoted to Safety and Risk Management.

Hale, Alan. Workbook supplement to the workshop "Safety Management for Outdoor Program Leaders," available by attending one of Hale's excellent sessions. For more information, write to The National Safety Network, PO Box 186, Bellefontaine, Ohio, 43311.

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