

TRENDS IN EMERGING AND HIGH RISK ACTIVITIES¹

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Abstract.--Newly emerging and high risk activities have increased markedly in the last generation, yet little is known about trends in participation. Factors such as technological innovation and creative experimentation with traditional activities appear to play a major role in the development of new activities. Christy's criteria for mass demand in recreation are used to examine the growth potential of different emerging activities. The participation histories of three characteristic activities--skydiving, sport ballooning, and hang gliding--are explored in detail. Trends in activity growth are also seen to be influenced by activity and risk sport image, and by potential for government regulation.

New recreational activities appear to be emerging at an exponential rate, particularly those involving an element of risk. Yet, little is known about either their participants or the activities. Where and how do new activities originate? What determines their popularity? What trends are evident? What special problems do they have?

THE EMERGENCE OF OUTDOOR RECREATIONAL ACTIVITIES

The origins of new activities can be traced to two different, though related

sources: innovations in equipment or experimentation with participation.

Several activities owe their entire existence to the development of a specific type of equipment or to a breakthrough in equipment materials. In most cases, the critical technology has come from outside the recreational industry. The first hang gliders were adaptations of the Rogollo para-wing, a design developed by a NASA engineer. SCUBA diving resulted from the invention of the aqualung, a piece of equipment originally intended for scientific and military purposes. For some activities, the right material was the essential missing ingredient. The kayak and the hot air balloon, for example, have existed for well over a hundred years, yet were rarely used for recreation. Nylon and fiberglass can receive much of the credit for changing that situation. New activities can also result from combining or modifying existing equipment. Surfing and skateboarding together with sailing have yielded board sailing and wind skating, respectively. The addition of motors to hang gliders has spawned the sport of microlight aviation.

Not all activities originate from equipment innovations, though specialized equipment tends to follow if an activity generates enough interest. Rather, a few individuals will explore new techniques and new environments, simultaneously, opening the way for new specialized patterns of participation. Rock climbers are making progress with solo ascents; skydivers are jumping from cliffs;

¹ Paper presented at the National Outdoor Recreation Trends Symposium, Durham, NH, April 20-23, 1980.

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and SCUBA divers are seeking underwater caves. It is difficult to predict at what point these experiments will create spin-off activities, though the potential for growth likely parallels popularity for emerging activities in general. Three examples of currently emerging spin-offs are out-of-bounds skiing, speed skiing, and free climbing.

DETERMINANTS OF POPULARITY

Christy (1974) outlined five elements that he felt were important for predicting the popularity of a recreational activity, particularly those that would stimulate mass demand. The following sections will apply these criteria to evaluate the potential of several emerging activities.

Ease of Participation

A number of factors are subsumed under this element, including initial costs, operating costs, training, and environmental prerequisites. Although many of the emerging activities require expensive equipment relative to tennis or cross country skiing, they are fairly inexpensive when compared to activities that offer similar experiences. Before hang gliding, the only gliding or soaring aircraft were sailplanes which sell for \$10,000 to \$35,000. The upper end of the price range for today's hang glider is around \$1500. The modern day hot air balloon is one-fourth the purchase price of a gas balloon (the traditional sport balloon) and costs approximately \$50 to operate as opposed to \$2000 per flight for gas balloons.

The subject of operating costs and hidden costs deserves further discussion. For some activities (hang gliding, board sailing, and rock climbing) the primary expense is equipment, followed by transportation to and from the recreational site. For others such as skydiving there are additional expenses: aircraft fuel and pilot fees.

As Christy points out, the nature of the necessary training can be an important variable for an activity's popularity. Is it short and pleasant or long and difficult? Board sailing involves little or no formalized training. Prospective enthusiasts can often rent a board and practice on their own at their own speed. Would-be skydivers, on the other hand, must adhere to a rigid training program that can be long and costly. To eliminate some of these difficulties, commercial schools (similar to the successful ski schools) have been established to streamline instruction and make it as comfortable as possible.

Environmental prerequisites also affect capacity for growth. Board sailors can use a variety of water resources unsuitable for larger sailing craft; and hang glider pilots can fly almost anywhere without worrying about paved landing strips. At the other end of the spectrum, cave explorers and rock climbers are faced with the relative scarcity of adequate resources.

Desirable Image

It is no accident that Madison Avenue has capitalized on the eye catching qualities of hang gliding, river rafting, sport ballooning, and skydiving. In contrast to everyday life, they portray adventure, excitement, and challenge. The transatlantic balloon crossing, the man powered flight across the English Channel, and the conquest of Everest without oxygen were prime examples of individual achievement. Today's recreationists can likewise experiment with new activities in unfamiliar environments, challenging their own frontiers. Undoubtedly, these pursuits can have a powerful effect on self-image as well as on one's public image. The quality of that image, however, may range from envy to bewilderment to charges of being foolhardy and irresponsible. Perception of risk is often a focal point of these images. The influences of safety concerns and perceptions of risk will be discussed subsequently.

Ability for Strong Identification

According to Christy (1974:103), "there must be some paraphernalia, costume, badge or trophy that identifies its holder as a participant in that activity." Nearly all emerging would score high on this element, given the proliferation of t-shirts, hats, belt buckles, patches, and decals sporting slogans and manufacturers names. Distinctive equipment (large and small) can serve the same purpose. Hang gliders, kayaks, and hot air balloon baskets are difficult to miss on car racks and trailers. On a smaller scale, channel locks hung from belts usually identify whitewater rafting guides. Certainly, many participants use these symbols to demonstrate their uniqueness, which becomes a problem when nonparticipants purchase such items as souvenirs or to be fashionable.

Opportunities for Demonstrating Skills

There are considerable differences among activities on this element. Sport ballooning, skydiving, and hang gliding are highly visible;

especially when close to public areas. They also lend themselves quite readily to exhibitions and demonstrations. Likewise, board sailors, jet skiers, and Hobie Cat sailors are almost always found near high use areas: beaches, lakes, and reservoirs. Cave explorers, rock climbers, and SCUBA divers are not so fortunate. More so than other activities, they have to depend on the media or on fellow participants for demonstrating their skills.

Comfortable and Efficient Use of Leisure Time

New designs and materials have had an enormous effect on comfort and efficiency. However, there are some factors beyond the scope of technology, as recreationists who depend on weather are painfully aware. Beginners, in particular, are susceptible to weather since they are the least able to handle even marginal conditions. Where weather tends to be unstable, they can expect to spend much of their training time waiting for conditions to improve. For those reluctant to invest precious leisure time for future rewards, the training period can be extremely frustrating. This feeling may be further compounded by a sense of social isolation that frequently accompanies beginner status. Experts tend to be possessive of their activity, especially when forced to share resources, putting beginners in the uncomfortable position of intruders. Where weather and social isolation combine, the popularity of an activity is likely to suffer. Although it is hard to generalize, skydiving and hang gliding tend to fall in this category.

ACTIVITY TRENDS

Now that we have examined those aspects of various emerging activities pertaining to mass demand, let us take an in-depth look at the past, present, and future of three activities: skydiving, sport ballooning, and hang gliding. These particular activities were chosen because of 1) their popularity, 2) their adventure/excitement image, 3) their growth curves, and 4) the availability of relevant background information. Board sailing was to be considered due to its recent phenomenal growth,¹ but was dropped due to an almost total lack of hard historical data.

¹ The spokeswoman for Windsurfer brand sailboards, the world's oldest and largest manufacturer, predicted they would sell 30,000 sailboards worldwide in 1980 compared to 125,000 sold since 1969.

Source of Data

Since data on actual participation is simply not available, an alternative approach was taken--the national organizations for the three activities were contacted and questioned about the participation of their membership. When pressed about previous years, however, most were reluctant to make retrospective estimates. Therefore, the growth curves presented in Fig. 1 represent organizational membership and not total participation. Yet, according to the officials of all three organizations, these figures do reflect what was happening yearly to the total community of participants.

Skydiving

A spokesman for the United States Parachute Association estimates that 35,000 individuals will make a total of about two million jumps this year. Included in that number are first time parachutists--less than 10% of which will make a second jump. Further, only about 1% to 2% will go on to become experienced skydivers. Currently, the USPA has a membership of approximately 16,000 to 17,000 skydivers² or about one half of the total participants. The turnover rate (50% per year) indicates that few skydivers remain active for very long, either in USPA or in the sport.

Skydiving dates back to the early barnstorming days, but it was not until the late 1950s that the sport caught on as a general recreational activity. In 1956, the Parachute Club of America was founded with sixty members. (In 1967, the PCA became the United States Parachute Association). Growth was gradual until 1960 when it increased rapidly (Fig. 1). Between that year and 1973, membership rose from 1417 to 17,624 individuals. This period of growth can be traced to three related factors: equipment, mass media exposure, and skydiving schools. Although surplus military equipment was in widespread use in the 1960's, it was either being modified or replaced, resulting in safer and more reliable parachutes. This period also saw its first extensive exposure to skydiving, including the television program--Ripcord. Concomitantly, commercial schools and independent clubs began to multiply, making skydiving readily accessible to thousands of potential customers.

² The figures since 1975 are approximate because membership is on a revolving basis, i.e., members renew the month their membership expires rather than for the calendar year.

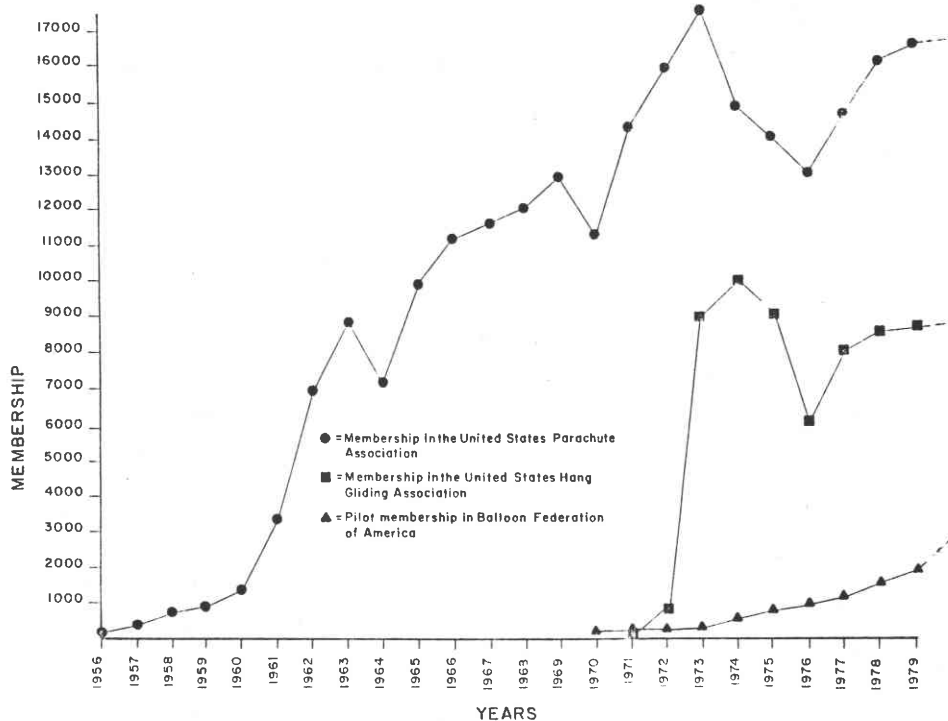


Figure 1.--Membership growth in three activity organizations.

Between the high point of 1973 and 1976, membership declined. A combination of an increase in dues and a general disenchantment with USPA was probably responsible. Therefore, the amount of this dip may not have been indicative of the entire skydiver population. By 1979, membership was again above 16,000. USPA officials believe that membership will stay around this figure for the next few years and that the total number of participants is stabilizing.

Sport Ballooning

Fifteen hundred balloon pilots currently belong to the Balloon Federation of America. According to the membership director, this figure represents 85% of all balloon pilots in the United States. In 1978, there were 1162 thermal or hot air balloons and 12 gas balloons registered with the BFA. During the same year, 38,791 hot air balloon flights were made by members, averaging 13.6 kilometers and about one hour per flight. In addition, the twelve gas balloons made 18 flights.

Sport ballooning in the United States began in the early 1960s with gas balloons, but the hot air balloon soon became more popular. As mentioned earlier, the hot air balloon is considerably cheaper to buy and operate. In 1967, the BFA was founded with 58 members. Three years later there were still only 66 members (Fig. 1). That slow rate of growth continued for several more years until 1973. From then until the present, membership has increased markedly. As with skydiving, better equipment, media exposure, and ballooning schools have all contributed to its growth. Certainly, the media exposure surrounding the successful transatlantic balloon flight (as well as the previous attempts) can be credited with much of ballooning's popularity. Officials of the BFA, in fact, believe that the number of participants will increase for some time to come, though the rate and time frame are uncertain.

Although the sport of ballooning is increasing in popularity, it is unlikely it will ever become a mass demand activity. Besides the initial cost of a balloon and

auxillary equipment, it requires a support crew to aid in launching and retrieving the balloon. To apply for a private balloon pilot's license, a student needs ten hours of free flight with at least six flights under the supervision of an instructor--that training can cost between \$1000 and \$1500.

Hang Gliding

Compared to sport ballooning and sky-diving, hang gliding is a new activity (barely a decade old). The national organization for hang glider pilots is the United States Hang Gliding Association which claims 8600 members for 1979. Actual participants, however, may be as high as 40,000. Beyond that estimate little is known. The problem with estimating participation is that hang gliders are easy to transport and can be used in a variety of environments--from backyard hills to beachside cliffs to mountain ridges. There are even portable, power winches that will pull hang gliders airborne for those without an elevated launch site. Wills (1979:20) summarizes the situation well: "No one can or will ever know that figure (the number of hang gliding flights) until every pilot on the planet punches in on a computer when he launches ... We can't even say how many pilots there are in a country, or even state, in a given month. Association and club membership is only a rough index. Some members fly, some don't. Some pilots are joiners, some anti-organization. Some fly--and die--all by themselves in remote areas."

Despite the inherent difficulties in calculating participation, the staff of the Whole Air Catalog collected some interesting data from their readership. Using this data, they estimated that 1,300,000 flights were made in 1978 with the majority of pilots making 9 to 15 flights per month (Johnson 1978a). They also discovered that the highest percentage (24.5%) of pilots still flying today began in 1976 (Johnson 1978b).

The growth curve of the USHGA is truly astounding. In its first three years, membership increased from 25 to 10,000 individuals (Fig. 1). In September of 1974 alone, 4000 people became new members. Two years later it dropped to 6000 and then rose gradually to its present level of 8600.

There are several possible explanations for this curve. In the early years of the sport (1971 to 1974), the majority of hang gliders were built at home from plans that cost between five and ten dollars. Entire gliders could be built for under \$100. As one would expect, the combination "man's oldest dream" at an affordable price attracted everyone from the merely curious to the serious recreationist. By 1974, designers began to turn away from selling plans to manufacturing pre-built gliders. As a result, prices rose to around \$500. Today, plans are all but absent and prices are in the \$1200 to \$1500 range. Undoubtedly this change was responsible for weeding out many would-be flyers. At the same time, new designs were cropping up so rapidly that many became obsolete soon after they were released--a discouraging situation for someone who just invested several hundred dollars. By 1976, most of the radical design changes were over, and manufacturers turned towards refining the hang glider. According to USHGA officials, the chaotic days of hang gliding growth are in the past. The curious and the thrill seekers have dropped out and are being replaced (albeit at a slower rate) by dedicated pilots. In fact, they predict that the present level of participants will remain much the same for the decade ahead.

SPECIAL PROBLEMS

Many of the emerging activities and high risk activities find themselves faced with two problems that could affect future trends: safety and the perception of risk, and government regulations.

The very term--high risk recreation--implies that the activities themselves are inherently unsafe. Many outsiders who might otherwise become participants believe that hang glider pilots, skydivers, rock climbers, etc. are at the mercy of fate, probability, or the elements. Few recognize that the majority of accidents are the result of participant error, not faulty equipment or factors related to the activity itself. For instance, a study of hang gliding accidents (Tongue 1977) found that those most susceptible to fatal injury were pilots with a cavalier attitude towards their participation. Freak accidents do occur, but these are rare. Unfortunately, the mass media tends to overplay the risks involved, giving many activities an undeserved bad image. While the potential for serious injury or even death does exist, the risks can be controlled through skill and experience

³ The original organization was the Southern California Hang Gliding Association.

(Schreyer and White 1979). The image may nevertheless discourage many while encouraging others attracted out of a sense of bravado or thrill seeking. These persons often become the stereotypes reinforcing negative images (and often become through carelessness the accident statistics that maintain those images).

The other factor that may influence future trends is the proliferation of government regulations. Generally, these are of three types: 1) to protect participants from injury; 2) to protect nonparticipants from injury; and 3) to protect the environment. In some cases, national organizations have headed off government intervention by either instituting self-regulations or by lobbying against regulations that could severely curtail participation. Such battles emphasize that there are factors affecting an activity's future which may have little to do with its actual potential for growth. The current use limits on many of the nation's wild rivers is a good example.

CONCLUSION

While the novelty and excitement of new recreational activities, particularly those involving an element of risk, have captured the interest of the mass media, there is an amazing lack of solid information about participation in these activities. Much more is known about the backpacker than the skydiver and the balloonist. In a world governed by priorities, that is perhaps understandable--there are more backpackers than skydivers and balloonists combined. However, if public and private planners are to provide a diversity of opportunities for satisfying different recreational preferences, emerging activities will have to receive the attention they deserve.

The need for information is underscored by the fact that certain emerging activities may be the answer to potential future constraints on recreation participation. Many of today's more popular activities are highly consumptive of precious natural resources. As these resources become scarce, recreational activities will have to change. That change, however, can be as exciting as it is needed. Activities such as hang gliding, board sailing, and free climbing not only use simple, functional equipment that is relatively nonconsumptive; but they are challenging and stimulating as well.

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