INTRODUCTION

Today I would like to start this part of my program by generally describing the vehicles, the users, and the current problems. Later on I will break out specifically motorcycles and snowmobiles to discuss. When I was asked, approximately a year ago, to fill this assignment, I began by telephoning those I knew in public and private ORV management positions. I sent letters and made many personal contacts as I traveled around the United States. As material arrived at my desk, I realized that "surface trends" research information, separate from "in house", was grossly lacking for this form of outdoor recreation. This paper is my attempt to verbalize the information we received. I warn you that what you hear me say may not be today's popular thoughts. With approximately 500,000 miles of travel in my off-road vehicle business responsibilities, I have realized that lack of valid quantity and quality trends information has been one factor contributing to current emotionalism, false concepts, and gross biases both for and against this activity. Another problem has been that there are many who profess understanding in planning for this reaction because they have some specialized knowledge that merely relates to the off-road vehicle. However, in fact, only a few public and private planners and land managers, academic types and others know and understand the vehicle, the land base and the enthusiast well enough to be credible problem solvers. Most problem-solving efforts have been crippled by confusion and misunderstanding from lack of good problem solution models. Special interest groups have resorted to political infighting.

Let me give you an example of current research information which, if pursued in more depth, could help solve some ORV problems we now face: Recreation, in and of itself, is a personal, multi-dimensional activity. It is done during one's leisure time and locates itself on a very broad continuum between the sharp contrast of furious involvement and contented relaxation. It may be backpacking, boating, horseback riding, tennis, exploring, camping or just eating, etc. As with each of these activities, motorized vehicle use is a dimensional extension of the individual that encompasses his physical performance. It rewards the participant for his skill and aptitude and he is further rewarded sociologically by his peers for his involvement. Lastly, he gains his own personal psychological growth as he reacts successfully to both positive and negative aspects of the experience.

I think we can sum up this very heavy, but important, concept by saying that recreation, and more specifically, off-road vehicle recreation, is different things to different people. It has to be researched, planned and provided for with this understanding.

Emotionalism and related problems we see today break down into three major areas: (1) a stereotyped image leading to unrealistic attitudes and actions towards the vehicle and its operator by the uninformed; (2) no standard base of definition, resulting in (3) poor inter/intracommmunication. For us to discuss this phenomenon more effectively, we must achieve a common level of understanding.

As previously mentioned, there are many kinds of "off-road vehicles" (ORVs): motorcycles, 4-wheel drive units, dune buggies, snowmobiles, etc. ORVs can be specifically designed for many uses, such as play activity, pseudo competition, structured competition, and recreational trail riding. The most common definition of ORV use implies only unstructured use of the equipment following no pathway on a resource. Knowledgeable viewers of the sport would expand the definition to acknowledge a substantial additional activity—that of using a lineal corridor, such as an unpaved, a graded or ungraded road, or a single wheel or similar pathway from Point A to Point B. (These definitions relate to both the design capabilities of the vehicle and how the enthusiast uses the machine.) The Statewide Planning Criteria chart will show relationships between machine and enthusiast for both definitions above. Who is
the enthusiast? He is:

1. One who is learning to operate the vehicle.
2. One who is engaged in a play and/or unstructured competition experience allowing him to use the machine to produce the recreation in and of itself, or
3. One who is involved in structured competition which enables him, after he masters the physical and mental requirements, to commit totally to the activity for a remunerative reward of some kind,
4. One who uses the vehicle also as a tool of transportation to participate in other recreation activities, such as camping, picnicking, fishing, photography, cultural sightseeing, riding for pleasure, and many, many more opportunities.

### STATEWIDE PLANNING CRITERIA

#### THE PARTICIPANT

- **Learning Experience**
  - Activities
- **Competition**
- **Play**
- **Recreational Transportation**

As I travel around the United States, working with federal, state and local agencies on this phenomenon we call off-road vehicles, I sometimes wonder if the representatives of government bodies don't cringe just a little at the challenges these vehicles present to them. I am sure they are hoping that "change" will somehow alleviate the controversy between ORV users and non-users, and calm the political waves that seem to follow this activity.

Gerald Jacobs stated in his writing "Conflict in Outdoor Recreation" that:

While theories of conflict are varied, many do share the perception of incompatibility as a common concept. In outdoor recreation, this concept suggests two factors at work: the perception of differences among people's lifestyles and the evaluation that encountering such differences is undesirable.

Positive adaption to change when some react in an unbiased manner to ORVs takes effort, not so much "reactive effort" as merely becoming informed. The "uninformed" often emotionally criticize ORV activity saying it creates high "impact" and seriously question it as a form of legitimate recreation. Even though alive and flourishing today, this thinking seems to be academic and after the fact.

In his April 14, 1971 press release announcing the establishment of an Interior Department Task Force to study the use of off-road recreation vehicles (ORRV), Secretary of the Interior Rogers C.B. Morton said: "We recognize that off-road recreational vehicle use is one of the many legitimate uses of federally-owned lands." To my knowledge, that philosophy has never been changed.

Stereotypes of ORVs have emerged over the years and persist in the minds of a large portion of the population. Reason is often overshadowed with statements that the vehicles "eat land"; "create environmental havoc"; "initiate devastating effects"; "disrupt animal life"; "impact moose"; "conflict with other human uses of the land", etc. The vehicles may, in some circumstances be what the above stereotypes depict them to be; however, more knowledgeable persons feel that such references could be eliminated with responsible research, planning, and facility implementation and management. Dr. Stephen McCool, in a talk before the forty-third North American Wildlife Conference, said: "ORV use appears to be more a function of intuitive managerial expertise and judgment and political pressure than a direct result of systematic problem-driven research."

John D. Peine, Ph.D., in an article entitled "Land Management for Recreational Use of Off-Road Vehicles, 1972," said:

ORV owners are as diverse as their vehicle designs. Personal interest and use may influence land travel patterns and attitudes toward the landscape. To the performance-oriented vehicle owner, the vehicle may be an end in itself, with its mechanical development being its major recreational value. These attitudes are important to the land manager developing a plan to provide quality experiences for the various types of vehicle users. It appears doubtful that one management procedure would be adequate for all types of vehicle users.

Perhaps the definition of vehicles and user preferences should follow a multi-dimensional activity reasoning. Dr. Peine lists in priority activities popular among all off-roaders: hunting, seeing the countryside, challenging terrain, camping, fishing, exploring, picnicking, comparing performance, observing wildlife, taking photographs, etc.
Dr. McCool, in analyzing the 1977 national recreation survey, noted a few interesting facts about ORV users:

"Despite years of research, we really know very little about the behavior and needs of ORVers.
*ORVers tend to be much more recreationally active and diverse than non-ORVers.
*ORVers view outdoor recreation as having greater importance than non-participants."

Dr. Keir Nash, in his research for the State of Washington, 1979, entitled "Understanding and Planning for ORV Recreation," summarized participant communication of problem perceptions of the activity this way:

"An important feature of the off-road recreation policy debate is the frequency with which participants starting from different premises, talk past each other. Perceiving the problem quite differently, they interpret the relevant data differently."

Dr. Nash clarifies the communication breakdown between users and non-users this way:

"The argument is advanced that underlying the conflict over ORV recreation are very different, occupation-related attitudes toward the machine. It is suggested that the real inconsistency lies not in mechanically-oriented-by-trade ORVers finding no disjunction between 'using machine' and 'appreciating nature', but rather in attitudes of verbally and visually oriented 'non-mechanicals' (professors, environmentalists, etc.) who think it all right for themselves to bring their 'tools in trade' into nature (books, scientific instruments, etc.) but not for the mechanically-oriented to perform the equivalent act. The duality between machine and nature is arguably created in the minds of the opponents—not a demonstrable 'real entity'."

In Summary of the Introduction

A vast amount of emotionalism and stereotyping of the sport exists due to a lack of knowledgeable people in planning and management for these vehicles. Basic definition information is lacking. The off-road vehicle enthusiast, by policy, is participating in a legitimate recreation activity. Past and current research has not provided information for adequate problem solutions. A communication breakdown exists among users, as well as between users and non-users. The ORV enthusiast is looking for social, physical, psychological recreational experiences, particularly "getting into nature". He is significantly more recreationally active in the out-of-doors than non-motorized participants, and because of his "mechanically-oriented-by-occupation attitudes", has difficulty communicating with or understanding non-machine-oriented resource recreationists.

Government

Recently, while studying a number of state comprehensive outdoor recreation plans, I was able to put into words what the concerns of public policymakers and resource planners and managers were as they relate to off-road vehicles. Those thoughts about ORVs, generalized as simply as possible, are:

*The subject is controversial.
*ORV recreation legitimacy is still debated.
*Noise is a serious problem.
*ORV resource damage is evident.
*Illegal and unmanaged use is a major cause of damage to public and private lands.
*Planning to accommodate this recreation is necessary.
*A need exists for providing opportunities, but the enthusiasts' needs must be identified and evaluated.
*Few public agencies are providing opportunities, which encourages users to illegally trespass and operate their machines in unmanaged ways.
*Current environmental and social problems will be compounded by failing to provide for the needs of ORV enthusiasts.

Some other ORV concerns of state public officials are:

*Involvement of the federal government on public lands, as required by Executive Orders 11644 and 11989 continues to be a concern.
*Requests from special recreation interest groups for the recreation dollar to provide facilities and programs is outpacing the means to generate the funds.
*Questions of legitimacy of this activity arise as the availability and cost of recreation energy becomes a tradeoff with utilitarian and commerce activities.

Rogers C.B. Morton gave the legitimacy label to ORVs, but he also announced, in 1971, the establishment of an Interior Department task force to study the use of off-road recreation vehicles: "The need for planned action to reconcile the competing demands involved in the use of off-road vehicles is urgent." His charge to the task force was "to develop, in cooperation with the states and other federal agencies, conser-
vation interests and the industry, a management plan to assure an optimum of recreation use with a minimum of environmental conflict." Unfortunately, nine years later, that charge for the most part is unreal.

As documented in the 1978 nationwide outdoor recreation plan, task force report Phase I...the San Joaquin County Council of Governments said:

"It is obvious that off-road vehicles are not going to go away; therefore, there is a need for more areas where they can be appropriately used and conflicts minimized."

In recent years hundreds of laws, executive orders, and outspoken environmental groups and sympathizers have brought about increased restrictions and constrictions on ORV use of federal lands. This pressure is putting a further increased burden on states and local governments to solve existing problems. States have, for the most part, been ill-prepared or have not wished to respond with responsibility to this emotion-ridden recreation activity. Fourteen federal government agencies and offices currently "guide" and "regulate" ORVs in approximately twenty-four areas of concern. One Department of the Interior agency said of the legislative mandates: "In many instances these laws and directives are conflicting. Regulations to date to implement the laws have not been fully promulgated. Enforcement authority has yet to be effectively delegated."

Two more areas are of vital concern in shaping the future of ORV activity in the U.S.--the economy and energy.

Present economic moves by federal and state governments are shifting the burden of funding from these agencies to outdoor recreationists themselves. Dr. Douglas Sessoms, futurist and chairman, Recreation Administration, University of North Carolina, has said, concerning future recreation funding, "We must look for alternative sources of funding...a more diversified pattern of funding must be developed, e.g. taxes, grants, user fees, all of these will be required to sustain our efforts." Outdoor recreation enthusiasts themselves seem to concur with Dr. Sessoms, as a recent Michigan household study has borne out. To the question, "In general, do you think Michigan's public recreation should be paid for mainly through fees and charges, through general taxes, or both?", they responded with:

Fees and charges 50 percent/households
General taxes 36
Both 13
Other 1

Energy availability and future costs are another concern, not only of government suppliers, but of non-users who criticize motorized vehicle use on grounds that it may not be classed as a legitimate recreation.

Estimated motorized recreational fuel consumption from a recent Council of Environmental Quality (CEQ) "Off-Road Vehicles on Public Land" report can possibly put in perspective the energy question.

Snowmobiles:
53 gallons per year per vehicle
2.2 million snowmobiles
Fuel consumption = 116.6 million gallons

Motorcycles:
30 gallons per year per vehicle
(1,500 miles per year divided by 50 miles per gallon)
5.4 million ORV cycles
Fuel consumption = 162 million gallons

Dune Buggies:
33 gallons per year per vehicle
(500 miles per year divided by 15 miles per gallon)
250,000 dune buggies
Fuel consumption = 8.25 million gallons

Four-Wheel Drive Vehicles:
500 gallons per year per vehicle
(5,000 miles per year divided by 10 miles per gallon)
1.5 million 4x4s used off-road (very rough estimate)
Fuel consumption = 750 million gallons

Subtotal 1,036.85
& other ORVs 13.15
Total 1,040 million gallons

I think Mr. Russ Shay's comment as editor in the July Sierra Club ORV Monitor editorial on this subject best sets a perspective as the situation is today: "Is that less than one percent (of gasoline consumed by all off-road vehicles) a terrible waste? People who say YES usually yield to a prejudicial judgment that ORVs are non-productive and, therefore, non-essential, and eminently expendable...But, once you start advocating "fuel censorship" by government, watch out. It's a Pandora's box..."

The high interest in outdoor recreation of ORVs over non-motorized participants suggests, as does the McCool analysis of the nationwide survey, that motorized vehicle participants will take "shorter trips for outdoor recreation...and it is likely to lead to higher frequencies of conflict with other recreational experiences and land uses."
In a 1979 Utah State University Department of Forestry study of 1500 randomly-selected households in six major metropolitan centers...a large majority agreed they would take less frequent trips (79.2 percent) and select vacation locations closer to home (76.6 percent) if energy became scarcer.

Enthusiasts' Problems and Needs

While government, environmentalists, and the public stereotype users into increasing restricted programs, the ORVers generally identify their problems and needs to be these:

*Federal, state, county or community governments are developing no visible ORV programs or facilities.
*Existing facilities and programs are poorly maintained and crowded.
*Former riding areas have been closed with no new alternatives being provided.
*Public agency ORV policies are either inconsistent or nonexistent.
*Few trained ORV administrators currently implement and operate facilities or programs.
*Major communication gaps exist between ORVers and federal and local land planning and management agencies.
*Few educational programs are in existence to objectively teach users, non-users, legislators, administrators, land planners and managers about ORVs.
*Non-participants inaccurately perceive ORV impacts; users believe those perceptions are more emotional than reasonable.

The Motorcycle

Let's focus on one of these vehicles, the motorcycle, and make some observations. There are 7,305,000 motorcycles in the U.S. today. You may appreciate that approximately fifty percent of the cycles sold each year are road bikes, and the other fifty percent, or 3,978,400 are off-road bikes. On-road and off-road motorcycle sales are increasing in response to the current energy crisis. Total sales through August 1979 look like this: under 125cc up 133.8 percent; 125 to 349cc, up 30.3 percent; 350 to 449cc, up 48.8 percent. The Motorcycle Industry Council says:

"The up-demand for motorcycles is due in part to some families buying a cycle for short shopping trips, etc., instead of buying a second car. Fuel cost is a major factor...cycles can get 80-90 miles per gallon, an important consideration."

Total sales this year are expected to increase about ten percent. Utilitarian and recreational use of the motorcycle will likely continue to promote increased consumer acceptance as the present economy and energy situation lasts.

According to the 1977 National Recreation Survey, among those who engaged in recreation activities more than four times during the past twelve months, "driving vehicles or motorcycles off road" was more popular than:

*Hunting,
*Camping in developed or primitive areas,
*Ice skating outdoors,
*Canoeing, kayaking, or river running, or
*Cross-country skiing, and was as popular as
*Boating

Cycle Magazine's 1977 subscriber survey indicated that their readers during the last twelve months personally participated in:

*Camping 49.6 percent
*Fishing 49.6
*Hunting 40.4
*Boating 39.3
*Bicycling 38.2

Demographics

The ORV user is typically a married male, average age of 29.8 years who has attended some college, and is in a craftsman or foreman position. His average income is $18,928. Seventy-seven percent have previously owned a motorcycle; 23 percent of current owners have never owned one before.

Dr. Reir Nash, whom we have previously quoted, says:

"Underneath a surface of similar average education, income, family lifestyle, there appear to be important differences--
especially in regard to the percentages of college-educated ORV recreationists (low, and not increasing substantially over the generations) and to the percentages of those in skilled craftsman and manual labor occupations (high, as is also union membership). There are disproportionately few high-status professionals among the ORV recreationists, except for engineers."

Recent happenings in motorized vehicle sales have brought much speculation about future direction public agencies should take in research, planning, and management. Private industry is also looking closely at future market opportunities and problems that may arise from the economy, energy, federal and state laws and regulations.

Off-Road and Dual-Purpose Motorcycles According to the Motorcycle Industry

The off-road motorcycle, as well as the dual-purpose machine, has suffered from the new emphasis on the utility aspects, rather than the recreational aspects, of motorcycling. The off-road cycle decreased 4.3 percent in unit volume during the first half of 1979.

"We are viewing the backside of a fad. We are seeing the maturation of a recreation activity and are witnessing a plateau of new enthusiasts."

Sanderson continued, "Unlike snowmobiling, whose users are concentrated in rural areas, motorcyclists in the northeastern United States are located in urban environments." He said, "I foresee that users will seek more recreational trail riding activity than play areas in the future."

Snowmobiles:

Snowmobiling has erupted from an insignificant activity in the early sixties, engaged in by enthusiasts mostly within the upper snowbelt states, to one of the most popular winter outdoor recreation activities today.

Currently, 1,900,000 (est.) snowmobiles are in use in the United States with approximately 14,200,000 snowmobilers participating in the sport. Snowmobiling and directly-related economic activity has reached over 1.6 billion dollars annually and generates in direct state tax and registration fee receipts $77.6 million dollars a year.

The present market appears to be basically a replacement one; approximately 85 percent of all snowmobiles are sold to those who already own at least one machine. This information is verified by A.C. Nielsen Research as interpreted by SnowGoer Magazine, which states, "The new buyer will likely come from present snowmobilers who do not own snowmobiles at the present time."

The past two sales years for snowmobiles have been most successful. The apparent reasons for two growth years back-to-back have been good snow conditions, a positive and growing economy, good positive dealer optimism, new areas of snowmobile use opportunities, and exceptional positive media coverage.

A November 9, 1979 Kiplinger Report states that "snowmobile sales are slumping...will be off ten to fifteen percent this season. Recession talk scares some buyers." Current government, industry, and users' comments followed: currently snow conditions are poor, a questionable economy, possible scarce energy availability, increased machine prices, and fewer available places to go. All these negatives are forging early unrest in the consumer's mind for purchasing snowmobiles in the 1979-1980 year.

Jerry Bassett, editor of SnowGoer Magazine states:

"The manufacturers that I've talked to think that recession, rather than fuel, will be the biggest determining factor to snowmobile sales, usage, etc. Overall, the industry outlook seems extremely optimistic in light of everything. Manufacturing levels are virtually in a 'sold-out' situation. This, of course, is a reflection of building to dealer orders--plus a percentage of increase."

Demographics

The typical snowmobiler is married and has 2.8 children over ten years of age. His average age is between 25 and 49 years. He is a skilled blue collar worker, whose family income averages between $15,000 and $20,000 per year. More than eight out of ten live in what would be considered rural areas. He lives where he can use his equipment on or directly from his homesite.

A study conducted by the Montana Department of Fish, Game and Parks shows that snowmobilers have a higher rate of participation in many other outdoor winter recreation activities than does the average Montanan. Of the 140,000 snowmobilers in Montana, one out of five also participates in downhill skiing, one out of seven in..."
Nordic skiing, one out of ten on snowshoeing, and more than one out of three in ice fishing. Almost half also participate in winter wildlife observation; approximately one out of five enjoys winter wildlife photography.

Snowmobile acceptance on public lands continues to increase, as depicted in a recently released national park policy statement:

"Snowmobiles are viewed as a mode of transportation which provide an alternate form of access when snow cover interrupts normal vehicular access to a park. Snowmobiles can transport park users to and from areas which are set aside for non-motorized forms of winter recreation, such as ice fishing, snowshoeing and cross-country skiing."

Not only is this acceptance increasing with resource administrators, but with that positive image growth, enthusiast solidarity has grown through their active involvement in moving legislation and political action; they have sought improvement of the sport through making money available, park development, and most recently, private industry initiative to establish destination tourism opportunities.

Trends

Now that we have dissected a number of elements that make up the off-road motorcycle experience, let's piece back together what that information may be telling us. In other words, let's look at how we might perceive motorized vehicle trends.

*The future of the off-road experience will depend on availability of land for specific ORV activities, the severity of regulations, and the capability of enforcement of federal laws dealing with the environment, resource conflicts, and consumer protection.*

*Because of diminishing energy availability and its increasing cost, ORV activities will soon move closer to the enthusiasts' residences, specifically in urban population areas.*

*Federal land management agencies will gain greater control over regulation ORV use on public lands; they will support increasingly fewer off-road recreation opportunities and provide less financial support in land acquisitions and programs. This leaves states, local communities, and enthusiasts responsible for increased acquisition, planning, and managing of these facilities.*

*An demand for facilities and services grows because of increased efforts by special interest groups of the recreating public, so will conflicts between motorized and non-motorized recreation activities. Better planning and management by state and local governments to meet these demands will be needed. Those activities that financially support their needs will enjoy the rewards of their efforts. Those who don't contribute financially to their sport will be looking for places to participate.*

*As public officials, enthusiasts, and non-enthusiasts are exposed to credible ORV people, information, and programs, adequate facilities will be identified, planned and developed. This will enable planners and managers to accommodate ORVs without environmental and user conflicts taking place.*

*Motorcycle enthusiasts in the future will consider this equipment more seriously as transportation alternatives to the automobile; therefore, we will see increased purchase consideration of on-road bikes and dual-purpose motorcycles.*

*Over the next decade we can expect to see shrinking of organized and semi-professional competition events, while those participating in recreational trail activities close to home will increasingly enjoy the out-of-doors in various forms.*

*Unmanaged off-road play experiences on public lands will be increasingly constricted.*

*Despite years of ORV research, lawmakers, resource planners and managers, and enforcement agencies know very little about the behavior, needs, and trends of this recreation group. During the first half of the 80's, researchers will be necessary by increased litigations over user and resource conflicts to take a more scientific approach to representing all outdoor recreators, as well as doing a better job in planning and managing public recreation lands for this activity.*

Summary Brief

Stephen F. McCool seems to summarize what I want to say:

"Despite years and years of research, we really know very little about the behavior and needs of snowmobilers and off-road recreation vehicle (ORV) users."

We won't solve the existing problems until we know who the motorized vehicle user is and what he wants from his sport.
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