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RECREATIONAL RESOURCE USE: WHO GAINS? WHO PAYS?

The Crow Wing Canoe Trail Case

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Summary: Recreational Resource Use: Who Gains? Who Pays?

Our current society values recreational activities. Opportunities for these recreational activities exist in many rural areas having high amenity features of water, woods and/or terraine. This demand for recreational experiences in the out of doors offers potential for economic return to the local community. It also presents challenges in management and control of the resource. Further, users have both rights and responsibilities. All of these factors interact in posing a resource management challenge.

The Crow Wing River, in use for nearly two decades a a recreational area, presents an almost classic case of the opportunities and management challenge.

In 1978 a 75 mile segment of the Crow Wing River in North Central Minnesota, provided over 80,000 person-days of recreational use. These recreators spent a total of \$305,000 in the area. The recreational use includes 26,000 person-days by local residents. Thus the Crow Wing River is not only an important economic contributor, it is a factor in living quality for local residents.

The river is commonly referred to as a canoe trail, but here is eyen more use for other purposes (picnicing, camping, fishing). The person-day comparisons are: 31,000 canoeing and 35,000 other use. Nine percent of the canoeing and 70 percent of the "other" recreational use is by local residents. In addition there are 7,000 person-days of use by non-resident property owners and 8,000 person-days of snowmobile use.

All types of summer recreators emphasize the contribution of high quality natural features to their recreational experience. "Observing nature"

ranked next to camping and canoeing as a recreational activity. The "natural vegetation" and the "water quality" ranked at the top of features that they liked.

Among the major problems of a recreational resource is that users must be physically present to obtain their recreational experience. This means that they will deteriorate the natural quality of the resource.

They compete with other recreational users, some of whom are local residents. If they are thoughtless - and many are - they disturb others, litter, trespass on private property and create acts of vandalism. In addition to these problems, there must be physical access for recreators to use the resource. Provision of this access requires expenditures by the local community and/or resource managing agency.

Another facet of visitor use is the economic opportunity. Most tourism economic return is generated from sales by private businesses. But the "sales offering" must be adequate in size, otherwise visitors will simply not be able to spend at an acceptable level. This sales offering may include not only outfitting, but food services, crafts and community events. Many rural communities do not present an adequate array of such goods and services for sale.

As a recreational resource develops, ownership patterns change. High amenity areas are sought out by private owners as sites for recreational property and rural residences. Proliferation of these ownership types poses yet another problem in management of the area's natural qualities.

The interplay of the above factors create questions about the area:

- --- who manages and controls?
- --- who benefits?
- --- who pays?

RECREATIONAL RESOURCE USE: WHO GAINS? WHO PAYS? The Crow Wing Canoe Trail Case $\frac{1}{}$ Uel Blank and L.R. Simonson $\frac{2}{}$

I. INTRODUCTION

This study is in follow-up to an earlier study in which the economic impact of the Crow Wing Canoe Trail of Wadena County was evaluated as of 1966. The earlier study focused almost altogether upon the economic impact of the river's development for canoeing purposes. Now, with nearly 20 years of recreational trail history, the current study reviews not only use and economic impact but also the relationship of the river as a canoe trail to the rest of the community, and to owners and citizens of the area. Included in the study are both resident and non-resident recreational users of all types and also riparian land owners and the way in which they have been affected. This approach recognizes that the first claim on any area is by residents, and land owners. At the same time it recognizes that every community and every citizen is a part of a larger society, and that most of the benefits which they enjoy are derived from that larger society. As a result continual balancing is necessary between private local rights and responsibilities, and those of the larger society.

Objectives of the Study

The objectives of this study were to:

1. Estimate the change in use and economic impact of the Crow Wing Recreation Area on the economy and employment of Wadena County compared with the 1966 study.

^{1/} The research upon which this report is based was partially supported by a grant from the Economic Research Services, USDA.

^{2/} Uel Blank is Extension Resource Economist, Department of Agricultural and Applied Economics and L.R. Simonson is Extension Specialist, Agricultural Extension Service, University of Minnesota.

^{3/} Uel Blank and Sterling H. Stipe. "Economic Impact of Crow Wing Canoe Trail, Wadena County," Minnesota ERS 406.

- Study the interaction between users, resident citizens, and owners, and evaluate the nonmonetary costs to resident citizens.
- 3. Evaluate the possible impact upon the natural area and its capability for delivering satisfaction to nonresidents as well as resident users in terms of a quality experience.
- 4. Observe the management of the area for recreational use in order to provide guidelines for improved management of the area, and to supply information for other areas seeking to make similar use of recreational resources.

In attempting to achieve these objectives, it is necessary to deal with four basic concepts as follows:

- 1. Resources, their management and conservation.
- 2. Ownership and control of resources.
- 3. Use patterns and social behavioral patterns.
- 4. Costs and returns; who gains, who pays for use of the resources and for benefits received?

The Crow Wing River Environs

The physical features and general background of the Crow Wing River have been discussed in some detail in the earlier study, $\frac{4}{}$ this description will not be repeated. However, it appears worthwhile to note the background and quality of the area that is treated.

The section of the river intensively studied is an approximately 75 mile length of stream extending from Shell City campsite to where the river leaves Wadena County in Section 32 of Thomastown township. In addition, the section of the Blueberry River extending west from Shell City

^{4/} Blank and Stipe, op. cit.

campsite to Highway 71 and the Crow Wing River extending southeast to the highway rest area at Motley were also included in the study, but less comprehensively.

The Crow Wing River has been flowing for a long time, probably 10,000 years, serving as a drainage way for glacial lakes and swamps. It is only in the last 100 years that man's imprint has altered the scene and left its mark. First loggers and then farmers developed their businesses; the first cut and moved on, the second stayed to clear the land, build their homes and raise their families.

The Crow Wing River continued to flow unfettered and used and enjoyed primarily by residents for fishing, trapping, wild rice harvesting and personal enjoyment. It was virtually unknown and relatively inaccessible to the broader world. This began to change in the early 1960's when local public development groups saw opportunity to open up the Crow Wing River to visitors by developing the area through the provision of accesses, campsites, multi-use trail networks and a modest information/direction system. Private enterprise soon followed with services supplying food and beverages, outfitting and marketing efforts of their own. A few who cam enjoyed the area so much - and found low cost land and riverfront available - that second homes began to develop. In other cases resident citizens, who were employed in the nearby service center communities, enjoyed the amenities and views and built year-around homes. Thus, man's imprint on the river environs has taken the form that is described here.

The area offers a semi-pristine environment to visitors despite what may be regarded as relatively heavy recreational use. The view from the waters edge includes a good measure of second growth timber with jack pine, aspen and other hardwood species most prevalent, along with an occasional

Norway pine. Recently-logged areas may be seen occasionally. Open fields, representing varying degrees of agricultural activity are intersperced with the forest scene. Public and private access and service facilities are spaced to provide essential services but not to the point of clutter. Highway crossings on the several bridges provide dependable landmarks to guage distance traveled. Wildlife may be seen by alert visitors including waterfowl and whitetail deer. Water quality remains excellent - even better than 12 years earlier when there was considerable barnyard pollution at points. The river course itself is relatively docile, offering few challenges of a whitewater nature but just enough shoals and rapids to give users a varied experience.

The Wadena County Economy

Wadena County is a relatively rural economy, based originally upon agriculture. Because of the relatively poor adaptation of its soil and climatic resources to agriculture its economy has suffered. In 1978 the median income of its husband-wife families was 37 percent below the Minnesota median and it ranked seventy-eighth among the 87 Minnesota counties.

Despite its apparent economic disadvantage Wadena County population grew by 12 percent between 1970 and 1977 from 12,412 to 13,900. Two-thirds of this net growth was estimated to be due to in-migration. Thus the county participates in the selective migration to certain rural areas in the United States, an important part of which appears motivated by a quest for living amenities.

The largest city, Wadena, operates as a transportation, trade and service center. This function now appears the most significant in the local economy as reflected in the fact that 59 percent of the county's paid employees were in the retail trade and service sectors in 1979.

Only 56 percent of the total land area of 343,000 acres is in farmland. This compares with Brown County, in the better agriculturally
adapted part of Minnesota, with 89 percent of its land area in farms. Of
the 191,400 acres in farms, 38 percent or 71,800 acres was harvested cropland in
1978. It should be noted that between the 1974 and 1978 Census of Agriculture long time trends in both numbers of farms and acres in farms
appeared to be reversed - increasing for the first time in decades. Thus
new patterns of spatial habitation and new technologies (irrigated agriculture is increasing in Wadena County) could have an impact on the county's
economy.

Research Methodology

Direct personal contact with both recreational users and area land owners provided the most important data source for this study. Information from many other sources supplemented this primary data, including: Canoe outfitters, Wadena County recorder's office, mail questionnaires, and conversations with local officials.

On a total of 16 randomly-selected days from early June to September contacts were made with 1,085 recreating users in 268 different parties. These contacts were made at river access points by 4-H members from clubs throughout the canoe trail length and by University of Minnesota researchers. Brief but essential data about each party was gathered in making these contacts. A spokesman representing each group was then sent a detailed questionnaire by mail. An amazing 87 percent were returned! This demonstrates that people will respond to matters of intense interest to them if they are properly approached - obviously a recreational experience on the Crow Wing River was of intense personal interest.

The above sample of recreational users was expanded to the total number using (1) data from the four area outfitters and (2) data from

aerial observations on six randomly-selected dates (a total of 645 canoes with 1,395 people were counted on the river in six 50-minute time periods on these six dates). In simplified form, the calculation to determine total numbers was

Resident owners of land adjoining the river (riparian resident land-owners) were not sampled, rather an attempt was made to contact all of this group directly. Of the 76 making up this group exactly 75 percent were contacted.

Absentee riparian landowners were contacted by mail questionnaire supplemented by telephone calls. Just over half (51 percent) provided information.

Estimates of snowmobile use were made based upon interviews with managers of service businesses along the Crow Wing River.

Wherever appropriate, data from the general Wadena County economy, and the economy, society and institutions of Minnesota are also incorporated into the report.

II. RECREATIONAL USERS AND THEIR IMPACT

Impact Summary - In 1978 recreational users of the Crow Wing River spent \$305,000 in the River area. This income went to a wide segment of the local economy. It includes not only operators of trail outfitting and direct services but many other local retail operators plus county tax payments. At least 80,000 person-days of recreational use was provided by the river. This includes 26,000 person-days of use by local residents. Thus, the Crow Wing River is not only an important economic contributor, it serves as a factor in living quality.

Overall Use and Economic Impact

In the 11 year period from 1967 to 1978 the rapid growth which had occurred in canoeing in the 1960's did not continue. There was an increase in person days canoeing from 25,200 in 1967, to 31,200 in 1978. This is an increase of about 24%. But expenditures by canoers grew rapidly. Expenditures in 1967 were estimated at \$49,000; in 1978 non-resident canoers were estimated to spend \$148,000 - a threefold increase.

Recreational use of the Crow Wing River includes much more than canoeing. Table 1 indicates this in summary form. Altogether, it is estimated that there are approximately 80,000 person-days of recreational use along the river in a 12 month period. In addition to 31,200 person-days of canoeing, there are an estimated 34,600 person-days of use directly on the river and the river area by people who are not canoeing. These include those who are picnicking, those who are camping in the river campsites, boating, fishing, and just enjoying the natural setting of the river and its environment. There are also over 7,000 person-days of use of the area by people who do not live in the area but own property or second homes along the river. Some of these are probably double counted in the above figures. In the winter there are snowmobilers, cross-country skiers and hunters. Of these winter recreators, only snowmobilers were estimated, and this estimate is only approximate - 8,000 person-days for the year. Altogether this study estimates \$267,000 to be spent in the area by people who are not residents and who come there primarily for recreational purposes. There is an additional \$38,000 spend by residents for recreational pursuits on the Crow Wing River. This \$38,000, even though spent by

^{5/} Blank and Stipe. Op. cit.

residents, is a legitimate return to Wadena County for having recreational resources and resource access points available, since this money might otherwise have been spend for recreational purposes outside the area.

Who Gets Crow Wing River Recreators' Dollars?

Table 2 shows the breakdown of the summer recreators' expenditures in the Crow Wing area. Thirty-six percent is spent for food; primarily in grocery stores, the general purpose stores along the trail area, and in area restaurants. Rental of canoes and camping equipment accounts for 31 percent. The third largest item, automobile expenditures, which is primarily for gasoline, is spent at area gasoline stations.

Lodging expenditures are low - only six percent of the total. This reflects the fact that most who stay overnight do so in public campsites, where rates are low. This low cost was cited by some as a contributing reason for recreating on the Crow Wing River.

Expenditures for "supplies" and "other" items are also relatively small; only 6 percent of the total. But these purchases are made from a wide range of retailer types.

A later section, page 18 treats expenditures by second home owners.

They will be observed to have a still different pattern of spending.

This further spreads the economic returns throughout the local county.

Who Uses the Crow Wing Area for Recreational Purposes?

Tables 3 and 4 show characteristics of the summer recreational users of the Crow Wing area. Compared to 1966, there has been a change in the home origins of canoeing recreational users. Relatively more come from nearby. Twenty-eight percent in 1978 came from Wadena County and the five adjoining counties, compared to only 21 percent in 1966. There is also a large increase in the proportion coming from other states, particularly North Dakota. Canoeing recreators from outside Minnesota almost doubled

in proportion from 12 percent to 23 percent in this 12 year period. Among the non-canoeists it was estimated that about 2/3 of the total person days of use were by area residents. Much of this was by people who were swimming, innertubing, fishing, and picnicking. This high level of local use underscores the river's value as a major recreational asset for area residents.

Of the recreating types, canoers come in larger groups, averaging 7.3 persons per party, with groups of 20, 30, or even more being relatively common. Those not canoeing averaged 4.3 persons per group. Both types of summer recreators were made up of about 1/3 children under 16, and about 2/3 of individuals 16 years of age or over. Household incomes of those canoeing averaged about \$21,000. This compares with a median household income in 1978 of \$18,540 in Minnesota. Those not canoeing had a somewhat lower average household income of about \$15,000. In many other respects they were similar. For example, canoers and non-canoers reported 14.3 and 14.4 years of schooling on the average, respectively, and there were 48 percent of both groups who reported family members who were employed as either professional, managerial, or sales personnel.

People from further away spend more money, on the average, for recreation in the Crow Wing River area compared to those who came from nearby, Table 5. Recreators from local and adjoining counties spent between \$4 and \$7 per person, per trip. This increased to a high of \$22 for residents of the Twin Cities and \$24 for residents of states other than Minnesota and North Dakota. Overall, those who were canoeing, not counting local residents, spent over \$13 per person per trip. Those who were not canoeing spent about \$9.50.

Those who canoed have been canoeing for an average of more than 10 years. They reported engaging in canoeing an average of 3.5 times annually.

Recreational Activities

In Minnesota, water recreation has tended to focus upon lakes. They have been regarded as sacred for this purpose, whereas, rivers were viewed as secular and profane. Recreational activities on the Crow Wing River contrast sharply with this view. There was opportunity to compare recreation use of the river directly with that on large, high-quality, nearby lakes. While it was not precisely quantified, the river's recreational activity was at a much higher level, perhaps by a factor of two to three times, compared to that on the lake. In addition to recreational activities reported in this section, the uses of the river by riparian owners are discussed in a later section, pages 16-23. This high level of recreational yield suggests management needs for river resources on a par with that of lakes.

While the area is especially noted for canoeing opportunities and has other trail facilities available, it is apparent from reports of recreators that it is the combined package of outdoor activities and experiences that attract them. Those canoeing and those not canoeing ranked their recreational activities in a similar manner. The exception is that canoers ranked canoeing at the top, and they indicated a more intense interest in recreational activities than those not canoeing.

The role of the natural setting and environment is shown by data in both Table 6 and Table 7. "Observing nature" ranks immediately after "camping" in the case of both canoists and those not canoeing. Further, the feature that is liked best is the "natural vegetation". Recreators apparently experience a high return from the opportunity to be out in nature and feel that they are a part of it in the river setting.

One in five of the canoeists and one in eight of those not canoeing reported that fishing was important to their experience in the area. Special note of this item is made because of the emphasis placed upon fishing in the state of Minnesota, and a common emphasis upon fishing, fishing opportunities and fishing competition that is voiced by residents of river and lake areas.

The appeal of the Crow Wing area as a recreational destination is shown by both the high rating given it by all recreators, Table 8, and by the fact that a high proportion of people were attracted to the area because of previous experience, Table 9. This previous experience might either have been their own or the recommendation of friends and relatives. Those not canoeing appear to differ substantially from those that are canoeing in that the former have closer ties to the area. Fifty-six percent of those not canoeing report that they have lived in the area and part of the attraction for coming there, as indicated in Table 6, is that they come to visit friends and relatives in the area. Twenty percent of this same group also report that they own property in the area.

For those who are canoeing, previous experiences played a major part. Fifty-five percent had either recreated there before and obviously liked it, or else it had been recommended by friends or relatives who presumably also had had a satisfactory experience. Fifteen percent report that advertisements about the area played a role in their coming. This proportion may appear to be low. However, it should be pointed out that the proportion attracted directly by ads for all types of recreational activities in Minnesota typically runs at a similar level. This does not diminish the value of advertising, rather it serves as one controllable factor of a number of factors that influence the decision by individuals to recreate

in an area. In all cases, direct personal experience or recommendations of friends are always more powerful than the impersonal and less direct impact from an advertisement.

There appears to be relatively little change in the average length of time that canoers were in the area in 1978 compared to 1966. It was estimated that the average trip was 2.6 days in length in 1966. In 1978 the average trip was 2.5 days in length. Those not canoeing stayed a slightly shorter period - 2.3 days. Those canoeing traveled an average of 9.5 miles per day. This appears to be slightly less distance than covered by earlier canoeists.

Attitudes Toward the River's Natural Features

The high quality natural features of the Crow Wing River area are major amenities for recreating there, Table 7. The water quality is good and continues good despite a relatively large volume of recreational use.

Further, the natural vegetation along the banks remains unspoiled. A high psychic return can be realized from a relatively thin band of nature vegetation along a river by those who are using it was a canoe. Users also appreciate the developed campsites which are well-appointed, well-maintained, and conveniently placed.

Those who are not canoeing and, as noted above, who have a closer tie to the area, also reported that they enjoyed seeing the farmland. There is nothing necessarily incongruent about both enjoying nature and enjoying well tended fields.

Both types of recreators reported disliking views of other developments for recreational and second home purposes. Further study of this item is needed to understand exactly what is objectionable about these features.

Are recreators repulsed because of poor taste in design or inadequate maintenance? Do they view these developments as intrusions on the natural setting?

User Problems

Compared to the features that they liked and that attracted them to the area, difficulties encountered by summer recreationists in the Crow Wing area seem to be minor. When asked to indicate problems only a relatively small proportion had specific complaints, Table 10.

"Insects" were the number one problem of all kinds of recreators. It should be pointed out that while this difficulty led the list it is a problem across the entire Great Lakes region, including both rural and urban areas.

Second on the list was people problems caused by other users of campsites, and picnic areas. Specifically, most of these were "partying groups". There was widespread documentation of difficulties caused by these partying groups. Complaints came not only from other recreators, who needed to share facilities with them, but also from resident owners and law enforcement and resource managing agencies. This difficulty extends over many other types of resource areas in addition to the Crow Wing River. It will be discussed further in later sections of this report.

Litter, or poor sanitation conditions ranked third as a problem for recreators, although it was well below the two other items. This, again, is at least partly caused by other individuals who are insensitive to maintaining the area's natural charm. It may also be due to difficulties with the local managing agencies in being able to keep up with the volume of litter that is produced. This difficulty will also be discussed in greater detail in later sections.

Is crowding a problem? That is, are 80,000 user days of recreational use in the Crow Wing area too many? "No", said over $\frac{1}{4}$ of the canoeists, and over 1/3 of the recreators who were not canoeing. About 40 percent of the canoers and only about $\frac{1}{4}$ of the non-canoers thought that the area

was slightly crowded. In other words, there was a distinct difference in the attitudes of tolerance for other people in the area on the part of canoeists, who appear to be more oriented to nature, than the non-canoeists who appear to be more in sympathy with the overall local area with the activities there and who appear to enjoy the company of other people besides those in their own party.

III. LAND OWNERSHIP AND RESOURCE MANAGEMENT SYSTEMS

What Are the Control Systems?

As the United States has progressed from an agrarian, frontier nation to a more densely populated, relatively urban nation with high mobility available to most citizens, the way in which we use land and the pressures upon land have changed. Because such pressures and resulting conflicts are a major factor in the current setting, the 1978 study included a careful look at those who own and manage resources in the Crow Wing River area.

Of what does the system consist?

- A. Resident land owners Individual land owners have been a major means of managing and controlling land and resources in the United States. Typically, rural land owners own land for use in farm production. But in the Crow Wing River area, the greater proportion of the resident riparian land owners own land as a rural residence, primarly because they enjoy the lifestyle. This pattern is permitted by the relatively high level of affluence of American society and the good transportation systems that are available.
- B. Absentee owners of land In the United States absentee ownership of high amenity properties has grown at a rapid rate. In the Crow Wing River area there are now almost as many absentee owners of land riparian to the river as there are resident owners. Use of riparian land for rural residences and for recreational and investment property poses an important

implication to management of the river as an ongoing, accessible recreational resource.

- C. Corporate land owners There are a relatively small number of corporate land owners in the Crow Wing area. There are some large corporately owned holdings riparian to the river. These are primarily managed for timber production.
- D. Township and county governments Most campsites are on land owned by local government. In addition to land directly owned, the county government has authority for land zoning regulations. Zoning ordinances apply to land along the river for a distance of 500 feet back from the shore. In general, these have to do with density and setback of developments from the stream, with waste management, and with vegetation management along the stream.
- E. State government The state government manages and controls resources primarily through the Minnesota Department of Natural Resources. Two of the campsites on the Crow Wing River, at Shell City and at Hunters-ville State Forest are managed by the DNR. The river passes through Hunters-ville State Forest and Lyons State Forest. In addition, the DNR has management and control of all navigable water, which includes the Crow Wing River, and has jurisdiction over fish and wildlife. In Minnesota, legislation provides that streams having certain high amenities may be designated "wild and scenic". The Department of Natural Resources proposed such a designation for the Crow Wing River, with hearings on the proposal in 1976 and 1977. The general effect of a wild and scenic river designation would be more stringent zoning regulations which would restrict development along the river bank and help maintain its "wild and scenic" qualities. The designation proposal was opposed vigorously by area residents with the result

that is was not approved. The local opposition based more upon fear of loss of control rather than lack of appreciation of the river resource.

In addition to the above control systems, there is the general recreating public which feels that they have the right to public waters and to public lands. They, along with all the systems described above, are a part of the dynamically interacting pattern of resource use, ownership management and control with operates in the Crow Wing River area.

Holdings and Land Use by Private Riparian Land Owners

From Shell City campground to the southeast corner of Wadena County there are 139 private owners of land with Crow Wing River frontage, 76, or 55 percent of whom are residential owners, that is they live on their land. The other 63, 45 percent, are absentee owners, Tables 12 and 13.

Residential owners hold an average of 177 acres with an average of 2,000 feet of frontage along the Crow Wing River. Almost half, 44 percent, have held their land for 10 years or less. But, another 35 percent have owned their land for more than 25 years. Some of these latter are decendents of families who initially homesteaded the land. On the average, the longer the land has been held the larger is the acreage owned. This partly reflects the fact that most long-time holdings have been operated as farms, whereas a relatively large proportion of recent land acquisitions are for the purpose of a rural residence. Sometimes these latter are on a relatively small land area. Holdings by absentees averaged only ½ the acreage of resident owners, or only about 20 acres, with about 1,200 feet of shore frontage. Well over half, 63 percent, of the absentee owners have owned their land for 10 years or less.

Over half of the resident owners, 54 percent, used their land primarily as a residence in the country. Thirty-five percent said they primarily used

the land as a farm. An additional 20 percent indicated that farming was a secondary use. Other items ranking high for secondary uses included:

Recreational property - 26 percent, timber production - 16 percent, and a rural residence. The fact that the land had been held by the family for an extended period was also named as a factor in ownership.

The two major reasons for nonresident ownership of land was as "recreational property" and as a "second home". Owning property for recreational purposes figures in almost 60 percent of the cases, with 36 percent indicating this as the primary reason and an additional 22 percent indicating it a secondary reason. Second home use ranked a close second to recreational property as the reason for owning land on an absentee basis in the Crow Wing River area. Ranking third was the holding of land as "an investment". While this was not a strong primary reason it was reported by 31 percent as a secondary reason, and overall was noted as a reason by 44 percent of all nonresident owners.

Two other reasons were important, primarily on a secondary basis.

One of these was that the land had been in the family for a long period of time. Presumably the family had moved, and members of the family had continued to hold title of the land as an investment, for recreational and for nostalgic purposes. Timber production also figured in approximately 20 percent of the cases mostly as a secondary reason for holding land.

Property held by absentee owners in the Crow Wing area was reported to be used an average of 31 days by 3.6 people. This means an average of about 112 person days of use per year. Studies of second homes, generally, in Minnesota, have found them to be used around 270 person days per year or more than twice as much. It is not surprising, however, that absentee-owned property in the Crow Wing River area would be used substantially less

than the average second home. For one thing, many of these properties do not have buildings on them. For another item, lake property might be expected to be used more than rural or wooded property. As a third item, as noted above, land that had been in the family for a considerable period of time, where present owners had moved away, might be expected to be visited infrequently.

Expenditures by Absentee Property Owners

Expenditures are closely associated with purposes and activities for which a property is used. Table 14 shows the average expenditure pattern of absentee property owners. The total of these expenditures is also given in Table 1 which shows overall expenditures for recreational purposes in the Crow Wing River area. They are not necessarily associated directly with the development of the river as a trail facility. They are, however, largely attributable to the high amenity qualities of the resource there, which are due to the river and to the native vegetation.

Absentee owner expenditures, as is the case of other recreational user types, are spread throughout the retail economy of the Crow Wing River area. The largest single item is for new major improvements. While this was high in the year studied, 1978, it is observed that new improvements are being added regularly to properties there. Thus, high expenditures for this purpose are not necessarily an abberation.

Absentee owners spent not only in the building and hardware stores for construction and maintenance, but also for local county taxes, for automobile services, groceries, restaurants, for purchase of outdoor recreation supplies, for entertainment, and for utilities. The total expenditure per property of \$729 is estimated at only 1/3 the level of the average second home owner in Minnesota, judging from the results of other

studies and projecting to the present using current inflation rates. Such local expenditure would be expected to be relatively low, for many of the same reasons that cause the average person-days of use of property to be low. Still, they are estimated to total \$46,000 of outside money into the local economy.

Recreational Activities by Property Owners

Many riparian property owners view the river as a recreational amenity. Finding concerning their recreational uses complements the recreational uses of nonproperty owners discussed on pages 10-12. What comes through particularly for those who own land as a rural residence, is a lifestyle in which the natural features of the river and other amenities of the Crow Wing River area contribute importantly to the patterns of living in the area, Table 15. Most of those who own rural residences have deliberately sought out that style of life. This is also true for a large number of those who operate farms, however, there is a difference between the two types. It was observed in discussing the use of the river with some farm owners that their interest focused primarily on their farm operation and the river was incidental; other farm owners felt the river to be an important factor.

These differences between properties owned as a farm and those as a rural residence show up in their activity patterns. "Rural residents" reported a higher level of recreational activity and particularly of active outdoor experiences. The exception to this is deer hunting, which farm operators rank highest, and which is ranked relatively much lower by those who own land as a rural residence.

Absentee owners also report a great interest in the availability of amenity features and recreational activities. However, their participation in activities is not nearly so intense or broadly based as is that of those permanent residents who own property primarily for residential purposes.

One feature that comes through loud and clear in all of this is that of the amenity aspects of living in the area. All classes of owners ranked enjoying "looking at the river" either at the top or next to the top. It is clear that nearly all of them appreciate the amenity features, and it is also clear that they wish to maintain those qualities.

Problems Reported by Riparian Property Owners

Table 16 gives a breakdown of attitudes towards other recreational users by Crow Wing River area riparian property owners. While overall, about half reported that other users reduced their enjoyment of the area, it is of interest that there were a number reporting that other users actually improved their enjoyment. This is mostly the case of those who owned rural residences on a permanent basis or who have second homes.

A number of these indicated that they enjoy watching the other river recreational users. About 1/3 of the owners expressed little concern either positively or negatively about recreational users of the river area. The exception to this was in the case of absentee owners who did not have improvements on their property. Half of this group indicated that they had little concern about other recreational users. This group owns property that cannot be easily vandalized, and are infrequently in the area to see what goes on.

The types and magnitudes of problems caused by recreational users to riparian property owners are shown in Table 17. In the case of residential property owners litter and trash was by far the most serious concern.

Ranking next to it were trespassing, theft, and property damage with noise and rowdiness by recreators also ranking importantly. Many of these were not solely river users as is discussed below.

Absentee owners show a different pattern. Those with second homes have a predominant concern with theft and property damage. This is understandable in the case of property improvements which are left unoccupied for a period of time. Something in the American psyche, particularly that of the young male, views unattended property as an open invitation to fulfill a sadistic streak. Absentee owners, who did not have improvements on their property, listed "litter" as the number one problem as did residential owners.

Table 18 classifies recreators according to types reported as causing the greatest conflicts and problems by Crow Wing area property owners.

Types of recreators that stand out:

- --- "partying groups" Which are immediately affiliated with "other" canoeists. These groups may be variously composed. One may consist of a group of college youth canoeing in company with a case of beer.

 Another may consist of local young people who drive automobiles into campsites, string their loudspeakers in the threes and turn up the decibles. It may refer to high-spirited youth in a scout troop where the leadership is inadequate.
- --- Hunters In most cas s deer hunters were directly referred to. Their appearing high on the "problem" list is significant since deer hunters are usually abroad for less than one month.
- --- Snowmobilers The researchers received the impression that snowmobilers are less a problem now than in the early adolescence of the sport in the 1960's. Snowmobilers produce problems because they have easy access to remote areas and they like to cover distances hence they trespass.

The listing of types of troublemaking recreators named by land owners neither condemns the sports named nor those who pursue them; there are many

responsible individuals within each type. Further, the list partly reflects popular images of those who cause problems (theft, etc.). One indication of this is the fact that a number named "motorbikers" as causing concern although motorbikes are mostly confined to roads in the Crow Wing area. A common observation of those whose property was not only riparian to the river but along a highway near a town, was that more litter was generated from the highway than from the river trail users.

Views of Future Uses

Asked to indicate future hopes for the Crow Wing area, the most common riparian landowner response was "it should remain as it is". Nearly one-half expressed such a thought. Because of the soil and climatic setting, the thought was often expressed that there were limitations to agricultural potential. But, over one-fourth thought that forestry development was a good idea.

There was concern over the density of residents in the area. Over one-third expressed need for limitations on residential development. A still larger number of land owners backed this up with the observation that they did not plan or want to subdivide their own land. The one exception: many would be willing to subdivide for other family members (i.e., children).

Nearly half, 44 percent, expressed directly a thought that recreational use should be maintained as of the present. Fewer than 10 percent expressed need for reducing it. This is of considerable interest since it suggests that present use levels are tolerable.

Ownership Fragmentation

In the 15 year period 1964-1979, there has been an increase of 32 percent in the number of different land ownerships in sections of land through which the Crow Wing River runs from Huntersville township south through five other Wadena County townships as follows:

		er of erships	Percent Change
Township	1964	1979	+ = increase - = decrease
Huntersville	21	37	+76%
Meadow	12	11	-9
Orton	72	84	+17
Lyons	71	85	+20
Bullard	67	106	+58
Thomastown	103	132	+28
Overall	346	455	+32%

Most of this increase in numbers of ownerships took place in the southeast sections of Thomastown township and in Section 14 of Bullard township.

In these areas, a number of relatively small parcels of land have been sold as rural residences, as second homes, and/or recreational property.

This division of land into smaller ownership parcels is occurring throughout most of Minnesota. It especially occurs near urban areas and in high amenity areas such as along rivers, lakes, forested areas, and in hilly terrain.

IV. ISSUES IN MANAGEMENT OF RECREATIONAL RESOURCES AND FACILITIES

This section treats questions of management and recreational use of the Crow Wing River area. These are questions that have been raised by area citizens, by users, outfitters, local governmental staff, and state resource agencies as well as by observations made in the study process.

The 1971 publication discussed initiation of the area as a recreational destination. This report focuses mainly upon management situations resulting from over 15 years of such use.

Not all questions raised have fully satisfactory answers. Because interests in the area differ, answers that are suitable from one viewpoint are often rejected when another viewpoint is considered. Thus, there is a blending of views in treatment that is an attempt at subjective resolution of problems and opportunities that can contribute positively to all interests. The questions are raised because they are real issues that must be treated and any similar area should be aware that it will face similar problems.

The Crow Wing River represents a classic case in rural recreation resource management.

- --- It is in a setting having high amenity qualities that were apparently underutilized and where many family incomes were relatively disadvantaged.
- --- An important objective in expanding recreational use of the area's high amenity resources was to capture added income.
- --- Recreational use can be expanded by the provision of access, facilities and promotion; but there are difficulties in achieving the hoped-for levels of income often because an adequate level of public and private investment is lacking.
- --- Recreational users, since they must come physically to the area for their recreational activity, put pressure upon wildlife and fragile areas, and create pollution. They may also create noise and make property intrusions. Need arises for added resource maintenance, pollution control, and policing.
- --- In addition to pressure from non-resident recreators, there are growing pressures to develop rural residences and second homes on high amenity sites. Land prices rise rapidly.

- --- Family incomes in the area have been disadvantaged, but they have now risen. Local residents now have extensive contacts outside the area and travel more. When they travel they hope for hospitable treatment in the host community, where they are tourists. They sometimes do not fully realize that they are the hosts to tourist-recreators who came to their community. They thus may not connect their responsibility for being good tourist hosts with their rights to good treatment as tourists when they travel.
- --- Public resource managing agencies seek more stringent resource management measures which are often opposed by residents who, understandably, prefer to keep controls closer at hand.

In the debate over management alternatives, sight should never be lost of the fact that the area offers opportunity for high amenity returns for residents and a quality recreational experience in the out-of-doors for those who seek it. Our current society values these opportunities. They are not available to the present generation without costs. They will not be available in the future without foresight and intelligent effort.

There is thus, the problem of how all competing interests are served while also preserving resource qualities - the major factor upon which much of the interest depends. The questions revolve about:

- --- who manages and controls?
- --- who benefits?
- --- who pays?

Considerations of Recreational Use Levels

After the initial surge of development in which use grew by seven times in three years, growth in use has moderated considerably. There was only a 24 percent increase in the 1967-79 period. But, with over 31,000 person-days of canoeing use and over 80,000 person-days of all recreational uses related to the river feature, there is a substantial level of recreational use. As noted earlier, researchers observed more people activities on the river than on large, nearby, high-quality lakes.

There is evidence that present recreational use is manageable. This is indicated by the fact that fewer than half as many land owners thought that there should be a restriction or limitation on recreational uses as expressed the thought to "leave it as it is". These are not necessarily opposite positions - those wishing to restrict may mean they do not wish greatly expanded or uncontrolled added growth, rather than scaling down the present level. The land manager of a large corporation owning land along the river summed it, "I'm glad to see the river get so much use and yet cause so few serious problems".

But, there are problems of use intensity:

--- Residents complain that both fish and wildlife, especially aquatic fowl are much more scarce than formerly. It has been noted that only 20 percent of canoers and 5 percent of non-canoeing recreators report "fishing" as an activity. Still this number of anglers, 6,000 in the case of canoeists, would put considerable added pressure on fish population. Clearly, there cannot be "wilderness fishing" with a volume of anglers. The disappearance of aquatic fowl is less easily explained. Wild waterfowl raise their broods in large numbers on intensively

used lakes within the corporate limits of St. Paul and Minneapolis. Loons, regarded as a bird preferring wild spaces, are even observed there. Thus, it appears that a combination of human presence, predators, suitable habitat, as well as other factors, may be involved in any limiting of waterfowl along the Crow Wing River.

- Expensive measures to control bank erosion at landing sites and campsites have been necessary.
- Forty percent of canoers felt the river to be slightly crowded. Thus indicating that they would prefer fewer recreational users.
- Most campers and snowmobiliers appear not to regard the area as crowded. Most such users have strong preferences for the company of other people.

Recreational use types have broadened in the past 12 years. Now there is innertubing. In addition to picnicing during the daytime, evening partying groups have discovered the park sites. Often they simply seek an available site; the river is incidental. Cross-country skiing has been added to snowmobiling. River-located residents, both year-round and seasonal, have been added to the scene.

Some key questions include:

- What is the optimum use level for recreational purposes?
- Should users be rationed at a given absolute level as is done in western river floats and in the Boundary Waters Canoe Area Wilderness?
- Should or can rationing be by price?
- Is it possible through improved area management to have substantially higher levels of use than at present, thus serving the nation's recreational need better and generating more local income?

- How would different services change the pattern of use and the impact upon resources and residents?
- What added services are appropriate?

Who Pays? What Returns Should Accrue to the Local Community?

Two pertinent observations suggest principles for use in setting up a system of services and payments for use of the Wadena County/Crow Wing River area:

- Users of the public sites should fully pay their way in terms of upkeep, policing, and sanitation.
- The local community should realize increased economic return from recreational users.

It is suggested that users be charged sufficiently that costs of policing, sanitation, and maintenance be covered. In 1978, a charge of \$2.00 was made for use of campsites overnite. But due to staff limitations this charge appeared to be unevenly applied. Payment is self administered on the honor system and it was common to find the supply of envelopes for payment missing. The charge should be increased to at least the level of state park camping and enforced more strictly. Some who were in the area just to camp stated that they came there because the charge was low. If increased rates result in less use this will put less pressure on sites and reduce needed sanitation and maintenance.

An alternative means of revenue is a charge for canoe launching. It is suggested that this apply only to non-residents of the area. The method is suggested only as an alternate or supplemental means of raising revenue, since it may encounter resistance and difficulty in administration. Overnite camping charges are well established in the public mind. Boat launch-

ing charges are a new idea in Minnesota. It is understood, however, that Maryland has successfully done this on certain rivers.

In Prince Georges County, Maryland, which is ajacent to Washington,
D.C., a charge is made to tourists entering parks. County residents may
enter free. Only non-residents must pay. This system assumes that local
residents are already supporting the recreational facility with their local
taxes and shifts some of the support to non-residents. An adaptable
variation of such a system could well apply to Wadena County.

Sales to visitors by commercial operations are another means of generating local revenue from the recreational users. The average per person expenditure of all non-residents is about \$5.00 during each trip. This includes money for campsite use which is about 6 percent of the total. The rest goes to purchase goods and services from area suppliers. It has already been noted that these expenditures are made to a wide range of supplier types.

Can this level of expenditure be increased substantially so that it produces further income and employment for the Crow Wing River area? It is suggested that this is possible even though services in the area received generally good marks by users, table 7. The subject will not be exhaustively treated here, but the following appear to be promising approaches based upon general observation of the area and market behavior information from other tourist studies.

- Food/beverage services are growing rapidly nationwide. Can added features of these kinds be made available in the area? It is recognized that the seasonal nature of visitor travel poses special limits.
- Wherever possible, there is need to upgrade the quality of service.

This has two advantages; higher prices per unit are possible, and user satisfaction is increased.

Consider special community events and attractions for which a charge can be made, or where products may be sold. (a) There might be fairs or antique sales in the local communities on peak weekends. These would have the advantage of spreading income to a wider range of residents. (b) There might be an entertainment program, local historical pageant, or special music events staged on high volume weekends. These could add to pride of resident citizens in their community as well as providing revenue. Examples of such community entertainment are provided by the Hiawatha Pageant at Pipestone, Minnesota, the William Tell Pageant at New Glarus, Wisconsin, and the Swissfest at Berne, Minnesota. Such offerings should provide a positive opportunity with local citizens in control and are in contrast to a proposed 1978 rock festival which was opposed by residents. (c) Special activity events can be added. At present, there are horseback trail rides. Might there also be canoeing or snowmobile rodeos, cross-country ski races or similar events?

Who Speaks for Whom? Who Controls? Who Plans for the Area?

The Crow Wing River area serves as a classic case of recreation resource management in that it incorporates many of the features that are key issues in use management and control of resources in a democracy. A summary of the several interests will serve to highlight points of view.

- Resident Owners - in the U.S. tradition their interests are disproportionately represented in resource decisions - this is their

- home! Owners speak for their local interests and the need to maintain their home environment. Most show high sensitivity to the amenity qualities of the river and are eager to maintain it.
- Absentee Owners are less intensively involved than resident owners since they are not maintaining their home area. However, they have sensitivity to the rivers' amenity qualities and speak for their own rights in property there.
- County Government in 1972 zoning was enacted that regulates development with 500 feet and required 200 feet setback from the river for structures and certain other density and sanitation measures. County government maintains the access points and campsites. It is generally responsive to wishes of local citizens.
- State Resource Managing Agencies speak for the resource in a major way. In a long-range sense they represent all state users, hence they cannot always be fully responsive to local citizens.
- Users are of many diverse kinds from family canoeists, to scout troops, to hunters, to local partying groups, to snowmobiliers. It is doubtful if the average non-resident user has respect for the river amenity and its resource at a level equal to resident land owners. Many are not accustomed to the outdoor setting, thus, they are not aware that some of the things that they do may result in overall harm if they are also done by a volume of others. There appear to be major educational needs to assist users to enjoy the wilderness while maintaining its recreational and aesthetic qualities. Except for those who are local residents, users ordinarily have a limited voice in management of the area, but they can exert political pressure if sufficiently aroused.

- Outfitters - represent an unusual combination of conflicting interests.

They are interested in volume of use since their revenue depends upon quantity. But all appreciate the resource and recognize that its qualities are necessary to long-range operation as well as to their own personal enjoyment as resident citizens. Outfitters have thus, taken an active role in cleaning up litter as well as maintaining the quality of the campsites.

The Natural Resource Quality: Can It Be Maintained?

It has been noted above that there is widespread concern for the resource quality. This quality has been maintained; users rate natural vegetation and water quality at the top among features enjoyed.

There has thus far been only limited development of land along the river for homesites and other uses. A 32 percent increase in the number of land ownerships has occurred in a 15-year period. While this increase in private residential and second home development along the river has not been rapid - it poses the greatest threat to the character and qualities of the river. This is based upon observation of what has and is happening to other high amenity lake and river frontages in Minnesota and elsewhere in the nation. Thus, the future secenario can be written as follows: Nearly all privately held land along the entire river will have a residence at least every 200 feet. Much of the natural vegetation will be cleared away. This private, personal development will greatly alter the character of the river experience for residents as well for visitors.

How can such a thing occur when there are zoning regulations, when most present owners greatly appreciate the river and most plans for sub-dividing land include only other members of the family?

Very simply and insidiously! It hinges upon the temporary nature of human life and the dynamic nature of the society.

Despite zoning regulations, recently-constructed homes have been located well within the 200 foot setback. Variances can be obtained.

However much present riparian owners wish to preserve their frontage land in an appealing form, every 20 to 30 years on the average it changes hands. When this happens, the property is vulnerable to exploitation for the highest dollar of gain. If this does not happen on a given ownership turnover, it may on the one following. By this process, piece by piece, the natural shoreland quality is lost — and with almost everyone opposed to such a loss!

As a first priority agreement should be reached upon what the river area should be. This study shows that general agreement already exists on a wide-spread basis. Then institutions, extending beyond the life of any mortal, need to be established. Quality maintenance usually requires constructive involvement of the entire control_system: residents, local governments, state government, commercial services, and users.

Management of Recreational Users: Some Are Thoughtless and Inconsiderate

Problems resulting from recreational use have been noted and are summarized here:

- Litter, the most widespread problem.
- Rowdiness and noise that disturbs others.
- Theft and property vandalism.
- Trespassing.

Many of these problems are caused by simple thoughtlessness. Who will ever see the can that I toss away out here in the wilderness? The answer is that many will see it if 10,000 others do the same thing each year! An

untended building appears to be an open invitation, to youth especially. Many do not fully realize that someone owns all the land along the trail and that getting off the trail except at designated sites is trespassing. High spirited young people can interfer greatly with the tranquility of a family group - especially late at night.

Unfortunately, some trespassing and property damage is sheer insolent rudeness. Groups from which there is the expectation of better behavior can be a disappointment! A group - whether church, scouts, 4-H or school - lacking adequate leadership can wreak havoc.

Are there solutions?

- User education is a first step. Perhaps this could be headed up through outfitters who are already directly contacting over one-half of all canoeists. They could explain rules for behavior and litter management. Outfitters could encourage - even insist - that customers bring their litter out.
- A simple set of rules should be posted at every access point.
- Perhaps a statewide education project to teach people how to enjoy
 the out-of-doors and help others enjoy it could be launched in public
 media and in the public school system. The Crow Wing River is not
 the only place where problems exist.

- Partying groups -

- (a) There should be adequate policing capability.
- (b) Many partying groups are local youth who drive to the campsites simply because they seek an available party site. In doing so, they disturb trail users and residents. Policy have played a cat-and-mouse game in chasing them out. Why not set aside areas especially for such partying purposes where there will be a minimum of disturbance for residents and other users?

- Hunters cause concern disproportionately to their numbers. Some land owners stated that they feared to go outside during the deer hunting season. Could Wadena County land owners form an association to control access at a fee? This would allow a known entrance point for users, it would bring revenue, and bring responsibility since hunters would be registered. Although fee hunting is not common in Minnesota, examples of it abound in other states. Its potential for improving the quality of the hunting experience and giving land owners greater control suggests need for investigating this concept. There are attendant problems - yes, but land owners have problems now.

Table 1
Person Days and Expenditures
by Crow Wing River Recreators, 1978

	Person-days	Local Spanding
Non Resident Summer Recreational Users		
Canoers	28,400	\$148,000
Not Canoeing	11,400	47,000 \$195,000
	39,800	\$195,000
Resident Summer Recreational Users		
Canoeing	2,800	6,000
Not Canoeing	23,200	32,000
•	26,000	\$ 38,000
Other		
Snowmobilers*	8,000	26,000*
Absentee Properties for Recreation		
& Second Homes	7,100	46,000
Hunters		
Cross Country Skiers ***		

^{*}Dollars estimated only for non residents.

^{**}Some of this number partly double-counted with other recreators.

^{***}Hunters and cross country skier data not estimated.

Table 2
Who Gets Crow Wing River Summer Recreator's Dollars? 1978

			Type of Summe:	
Expenditure purpose		Canoeists %	Not Canoeing %	All Non-Local Recreators %
Food		31	52	36
Lodging		5	8	6
Auto		18 .	31	21
Supplies		5		4
Renta1		39	4	31
Other		2	5	2
Total:	Percent	100	100	100
	Dollars	\$148,000	\$47,000	\$195,000

Table 3
Crow Wing River Canoers: Home Location
by Group Composition & Trip Length
1978

			Composition*			·ip*
Home Location	Number %	Average No./Group Number	Adults %	Children %	Average No. Days days	Ave. Miles Canoed Per Day miles
Wadena County	9	6.4	61	39	2.0	8.6
Adjoining Counties	19	12.3	49	51	2.6	11.3
Outstate MN	32	7.8	71	29	2.4	8.7
Twin Cities MN	17	6.8	78	22	2.3	12.0
North Dakota	20	5.8	71	29	2.7	8.8
Other States	3	4.0	54	36	3.4	7.5
All Users	100%	7.3	66%	34%	2.5	9.5

^{*}Percentage figures for adults and children add horizontally to 100 percent for each home location.

Table 4
Crow Wing Recreators Not Canoeing: Home Location
by Group Composition & Length of Trip
1978

	Number People	Ave. Number Per Group	Adults ***	Children***	Average Length Stay
Home Location	%	Number	%	%	Days
Local*	*	eq és		es as	*** ***
Adjoining Counties	24	6.0	78	22	3.0
Twin Cities MN	14	3.3	50	50	3.0
Rest of MN	51	4.6	57	43	2.0
North Dakota	11	2.7	88	12	2.3
Other States**	0		600 640	. da de	***
Total: Non Local	100%	4.3	64	36	2.3

^{*}Estimated numbers of non canoeing summer use-days: Local 23,200; other 11,400 **None contacted during survey.

^{***}Percentage figures for adults and children add horizontally to 100 percent for each home location.

Table 5
Average Per Person Expenditures of Crow Wing River Area
Summer Recreators by Home Location, 1978

Home Location	Type of Summer Canoers	r Recreator Not Canoeing
Local	\$ 4.40	*
Adjoining Counties	6.95	11.00
Twin Cities MN	21.60	8.05
Rest of MN	9.60	6.60
North Dakota	16.51	16.25
Other States	24.30	**
A11 .	\$12.47	· · · · · · · · · · · · · · · · · · ·
All Except 'Local'	\$13.27	9.48

^{*}Local recreators reporting expenditures in the survey were not representative of all local users.

**None reported.

Table 6
Recreational Activities Most Engaged in
by Summer Recreators on the Crow Wing River, 1978

	Cano	pers	Not	: Canoeing*
	Activity	Ranking the Act of Top Importa	ivity Activity	Ranking the Activity of Top Importance
1.	Canoeing	% 92	1. Camp	% 56
2.	Camping	. 72	2. Observe Nat	cure 44
3.	Observe Nature	57	3. Picnic	40
4.	Re1ax	46	4. Relax	36
5.	Swim	29	5. Swim	36
6.	Picnic	25	6. Socialize w Friends	7ith 28
7.	Socialize with Friends	25	7. Visit Frien Relatives	
8.	Fish	21	8. Sightsee	20
9.	Sightsee	14	9. Innertubing	; 16
10.	Innertubing	10	10. Fish	12 (Tie)
			10. Photography	• •

^{*}Residents not canoeing are not well represented in the study. Had it been possible to include them swimming & fishing particularly would have shown much higher rates of participation.

Table 7 Attitudes Toward Features of Crow Wing River Area by Summer Recreators, 1978

	Canoers		Not Canoeing
	Items R	atings*	Items Ratings*
Α.	Liked		A. Liked
	1. Natural Vegetation	1.4	1. Natural Vegetation 1.4
	2. Water Quality	1.4	2. Water Quality 1.5
	3. River Campsites	1.5	3. River Campsites 1.8
	4. Services by Stores & Outfitter	1.9	4. Views of Farming 1.9
В.	Disliked		B. Disliked
	1. Private Rec Areas & Second Homes	3.3	1. Private Rec Areas 3.6 & Second Homes
	2. Views of Residences Along River	2.9	

^{*}Rating scale 1 = like most; 5 = dislike most.

Table 8
How Does Crow Wing Trip Compare With
Other Vacation Experiences?

	Ту	Type of Recreator			
Rating	Canoeists %	Not Canoeing %			
Excellent	30	24			
Good	56	57			
Fair	14	19			
Poor	0	0			

Table 9

Most Important Factors Influencing the Decision to Recreate in the Crow Wing River Area by Type of Recreator, 1978

Canoers	Percent	Not Canoeing Per	cent
Item	Naming the Item	Item Naming	the Item
	%	***************************************	 %
1. Recreated There Before	55	 Have Lived in the Area 	56
2. Recommended by Friends	54	2. Recommended by Friends	40
3. Have Lived There	20	3. Recreated There Before	28
4. Outfitter Advertisemen	t 15	4. Own Property There	20
5. Recommended by Local People	7	5. Newspaper or Magazine Story	. 4

Table 10
Problems Most Frequently Named by Summer Recreators in the Crow Wing River Area, 1978

	Type of Recreation			
	Canoeists	Not Conceing		
	Percent	Percent		
Problem Type	Naming Problem	Naming Problem		
	9	"		
	6	• •		
1. Insects	36	32		
2. Users of Campsites/Picnic Areas	21	24		
	10	16		
3. Litter or Poor Sanitation	18	16		
4. All others*				
4. Ali others.				

^{*} Percentage figure not shown since multiple responses were permitted.

Table 11
Attitudes of Summer Recreators Toward Extent of Use & Crowding

	Type of Recreation				
Crowding Category	Canoeists	Not Canoeing			
	%	%			
Not Crowded	26	35			
Slightly Crowded	39	26			
Crowded on Weekends & Holidays	27	22			
Crowded on Holidays Only	. 5	13			
Crowded All the Time	2	4			
	Bit to section to the				
Only One Answer Permitted - Total	100%	100%			

Table 12. Average Acreage and River Frontage by Length of Tenure for Private Riparian Land Owners along the Crow Wing River 1978

		Type of Owner						
	Resi	dentia	1	! 	Absentee			
	Number	Land	River Frontage	Number	Land			
		acres	feet	1	acres	feet		
All Owners	76	177	2000	63	41	1200		
Length of Tenure	%		•	%				
0-5 yrs.	44.0	90	1130	29	33	460		
6-10 yrs.)		:	34	36	1160		
11-25 yrs.	21	151	1960	34	52	3120		
25 yrs. & over	35	279	3500	3	40	800		
						!		

Table 13. Reasons for Owning Property in Crow Wing River Area 1978

A. Resident Riparian Owners

Primary Reasons* Secondary Reasons		Secondary Reasons**
Reason	Owners Naming %	Reason Naming %
1. Rural residence	55	1. Recreation property 26
2. Farm	35	2. Farm 19
3. Business other than farm	4	3. Timber production 16
4. In family a long time	4	4. Rural residence 14
5. Investment property	2	5. In family a long time 14

B. Non-Resident Riparian Owners

	Secondary Reasons**		
Owners Naming %	Reason Owners %		
36	1. Investment property 31		
32	2. Recreational property 22		
13	3. Timber production 19		
7	4. In family a long time 16		
7	5. Second home 6		
	Naming % 36 32		

^{*} No duplicate answers

^{**}Duplicate answers permitted.

Table 14. Average Expenditures by Non-Resident Riparian Property Owners in Crow Wing River Area, 1978

Property Expenditures	Average Per C	wner	
	\$	%	
New major improvements	366	50	
Upkeep	42	6	
Taxes	70	<u>10</u>	
Subtota1	478	(66)	
Operation & Activities			
Transportation	88	12	
Groceries	78	11	
Eating Out	27	4	
Outdoor Recreation	23 •	3	'e
Utilities	22	3	
Entertainment	_13_	_2	
Subtotal	<u>251</u>	(34)	
TOTAL LOCAL EXPENDITURE	\$729	100	

Table 15. Recreational Activities by Riparian Owners in Crow Wing Area by Type of Owner and Basic Property Use 1978

Recreational Activities & Uses of Resident and Absentee Owners

A. Residential Owner

Property a FARM: Property a RURAL RESIDENCE Recreation Owners Recreation Owners Type Naming Type Naming % % 1. Deer hunt 40 1. Enjoy look at river 50 2. Enjoy looking at river 40 2. Fish from bank 44 3. Fish from bank 20 3. Fish from boat 44 4. Canoe 20 4. Swim 44 5. Enjoy Wild Life 20 5. Canoe 25 6. Swim 20 6. Enjoy Wild Life 25 7. Fish from boat 13 7. Inner tube 25 8. Hunt ducks 13 8. Deer hunt 13 9. Picnic on own property 13 9. Hunt ducks 13

B. Non-Residential Owner

Property Used as SECOND HOME

Property Not a SECOND HOME

13

10. Cross country ski

Re-	creation pe	Owners Naming %	Recreation Type	Owners Naming %
1.	Enjoy look at river	57	1. Enjoy look at river	50
2.	Swimming	43	2. Camp overnight	43
3.	Deer hunt	29	3. Deer hunt	36
4.	Canoe	29	4. Fish from boat	29
5.	Picnic on own property	29	5. Canoe	29
6.	Enjoy look for Wild Life	29	6. Fish from boat	21
7.	Look for flowers, etc.	29	7. Picnic on own property	21
8.	Fish from bank	14	8. Enjoy look at Wild Life	21
9.	Watch other users	14	9. Look for flowers	21
10.	Snowmobile	14		

Table 16. General Attitudes of Riparian Property Owners Along Crow Wing River

	Resident Owners		Non-Resider	nt Owners
	Farm	Rural Residence	Second Home	Not 2nd Home
	%	%	%	%
1. Reduce Enjoyment	59	45	40	43
2. Are of Little Consequency	33	34	30	52
3. Improve Enjoyment	_8_	21	<u>20</u>	_5
	100	100	100	100

Table 17. Most Serious Difficulties with Recreational Users of Crow Wing River Area Reported by Riparian Property Owners, 1978 *

A. Residential Owners

Property Used as Rural	Residence	Property Used as Farm	
Problem	Owners Naming %	Problem	Owners Naming %
1. Litter	35	1. Litter	41
2. Theft	17	2. Trespassing	26
3. Noise & Rowdiness	14	3. Damage to property	19
4. Trespassing	14	4. Invasion of privacy	15
5. Vehicles off roads	7	5. Vehicles off trails	15
6. Fires	3	6. Theft	15
7. Damage to property	3	7. Noise or Rowdiness	11

B. Non-Resident Owners

Property Used as Second	Home	Property Not a Second	Home
Problem	Owners Naming %	Problem	Owners Naming %
1. Litter	69	1. Litter	47
2. Damage to property	62	2. Damage to property	41
3. Vehicles off trails	46	3. Trespassing	35
4. Theft	46	4. Invasion of privacy	29
5. Trespassing	46	5. Vehicles off trails	29
6. Invasion of privacy	39	6. Theft	29
7. Fires	39	7. Fires	24

^{*} Multiple responses permitted.

Table 18. Types of Crow Wing River Area Recreators Reported by Riparian Land Owners as Causing Most Serious Problems, 1978

A. Residential Owners

Property Used as Rural	Residence	Property Used as Farm	
Recreation Type	Owners Naming %	Recreation Type	Owners Naming %
1. Partying group	38	1. Partying group	41
2. Hunters	10	2. Hunters	22
3. Snowmobilers	10	3. Non-family canoeists	15
4. Non-family canoeists	7	4. Snowmobilers	15
5. Picnicers	4	5. Fishermen	4
6. Motor bikers	4		

B. Non-Resident Owners

Property Used as Second Home		Property Not a Second	Home
Recreation Type	Owners Naming %	Recreation Type	Owners Naming %
1. Partying group	50	1. Partying group	35
2. Non-family canoeists	33	2. Non-family canoeists	24
3. Fishermen	17	3. Snowmobilers	24
4. Picnicers	17	4. Hunters	12
5. Campers	17	5. Motor bikers	12
6. Motor bikers	17	6. Picnicers	6

Proposed Cutlines for Crow Wing River Area pictures. Numbers correspond to the number in upper right of each picture.

- 1. A small interpretive board marks the site of Old Wadena Settlement.
- 2. Litter is one of the most widespread problems of an outdoor recreation area. Regular maintenance is required.
- A second homeowner uses his property as a base for riding area snowmobile trails.
- 4. Some of the river sites are heavily used by picnickers, for camping, for family gatherings and for evening parties, as well as by canoers and boaters.
- 5. (skipped)
- 6. Agriculture intersperses with timbered areas. At some points barnlots are immediately beside the river.
- 7. Rural residences and second homes, where they are developed, alter the river's character more than any other features.
- 8. Swimming and innertubing are popular in the clear waters of the Crow Wing River.
- 9. Small communities along the river have opportunities for expanding services to increase their economic returns from river recreators.
- 10. Canoeists enjoy a walk into town at communities along the river. Their purchases add to local income.
- 11. Within the general river area the Minnesota Department of Natural Resources provides added wildlife habitat.
- 12. Recreators rated the "natural vegetation" at the top of things that they liked about the Crow Wing River Area.
- 13. Good outfitting services are a necessity for many of those who recreate in the river area.
- 14. Intensive management to control erosion at river access sites has been found necessary.
- 15. On good summer weekends many river campsites become crowded.
- 16. About one-fifth of the canoeists fished. Good catches were reported by skilled anglers.
- 17. Wild rice provides the foreground for a canoe-load of recreators. "Ricing" is a sport enjoyed mostly by residents.
- 18. A high proportion of non-resident owners of land along the river use it for recreational property.

- 19. Canoeing with a group of compatible companions is fun for many.
- 20. In addition to agriculture, logging and small sawmills operate in the Crow Wing River Area.
- 21. Much of the upper reaches of the Crow Wing River is in timber production.