An Inventory of Recreational Use of One of a System of Ontario Provincial Parks

Report of the 1994 Field Season

David O. Watson
Kent Baylis
Peter Boxall

File Report

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Section 1. Introduction

1.1 Study history

In the fall of 1992, a study was initiated to determine the value of backcountry recreation in Eastern Manitoba. Although work was also conducted in Atikaki Provincial Park, the primary focus of the study was Nopiming Provincial Park. These provincial parks were chosen because of the region's known resource use conflicts between recreationists and the proponents of forest product harvesting. As well, the parks had a registration system and there was limited means of access to them. Both factors permitted more complete capture of information on users.

The field work for the first Manitoba phase of the study was carried out during the summer period of 1993, with a revised onsite registration survey of users, and an inventory of biophysical attributes of importance to backcountry users. [This work, and the efforts to create a system of registration that would determine the full extent of backcountry recreation use are outlined in Watson et al (1994)].

During the course of the field work, and subsequent modelling efforts, there arose the hypothesis that these two parks were part of a larger demand system that included other parks in Manitoba, Ontario and Minnesota. The map in Figure 1 shows the parks believed to make up this demand system. To test this hypothesis, the study was expanded to include as many of the system parks as possible. Note that the continuation and expansion of the field work in the Manitoba provincial parks in 1994 (Atikaki, Nopiming, and Whiteshell) is contained in a separate report. It was not possible to do field work, or to obtain registration information concerning the BWCA (Boundary Waters Canoe Area) in Minnesota because of jurisdictional and monetary issues.

1.2 Study Rationale

This report outlines the field activities carried out in Ontario provincial parks and the results of this study. One of the things motivating this study was the fact that very little research has been carried out on wilderness recreation in Canada - especially on alternative recreation areas. Because of this lack of research, and the initial work in Manitoba, there was an opportunity to amend this gap. The system of alternative parks proposed for study provides a

unique chance to determine the choices that recreationists make when deciding on a site for their activities. These parks are reasonably close together (some share boundaries), have a diversity of recreation and management attributes, and all show various levels of conflict with other resource uses such as forestry and mining. The system as a whole is bounded by large urban areas that provide the major clientele. To the west lies Winnipeg, to the south Minneapolis and St. Paul in Minnesota, and to the east Thunder Bay. As well, the unique wilderness aspects of these parks draw users from further places, such as Toronto, Illinois, and even Florida.

Economic modelling of use patterns, coupled with knowledge of the attributes of the parks, allows the determination of the park attributes of both management and environment that inspire a user to visit. And within individual parks, information on the attributes of particular routes is useful for economic modelling on the willingness to pay for specific ecosystems. This sort of economic analysis is essential in individual park planning and in determining the size of park(s) which need to be created. Cooperation between the various park managers is necessary to ensure that the type of wilderness experience desired by different clienteles is provided.

The importance of this type of economic analysis is reflected in the concern over usage that was already seen in the 1970's, when it was recognized that Quetico and the BWCA were prime attractants in this area, and that users felt that these parks were becoming congested (MNR 1977). The 1977 Quetico Master Plan laid out the hope that "other areas" would be further developed to relieve this congestion in Quetico. Since then, further restrictions on use in Quetico and the BWCA have been implemented. And with a known increase in the number of people desiring a wilderness experience, (for example, see Lime 1984), and the prime areas already congested, the other parks in this system will start to see more use. The users of these other areas, who, until now have had a solitary time on their trips, will begin to see more "competition" for use in parks like Woodland Caribou by people who may want a different type of experience. For example, areas that in the past allowed motor boats may now see a demand for a more pristine use pattern.

Another recent issue that impacts on the inter-relatedness of these parks is the proposed change within the OMNR to an "enterprise model" of operation. Under this plan, individual parks are allotted an operating budget, and the freedom to set their own levels of fees (within certain boundaries). Each park will collect and retain the fees collected there, for management

of that park. Under this plan, the setting of fees within each park should definitely affect the visitation rates for all of the parks in the system.

Conflicts between different types of recreationists is less of a concern than conflicts between recreationists and those involved in resource extraction activities. Although none of the Ontario Parks examined here have major resource extraction within their boundaries, extraction activities in the region do secondarily affect the parks, whether it be by expansion of road access to park boundaries,the invasion of noise and pollution, or even a population increase of workers. In fact, in the past, several of the parks have had their boundaries decided by the presence of valuable resources in the area. While current regulations do not allow park areas to be exploited, or land to be removed from park designation, this may not always be the case. Therefore, a solid economic knowledge of the value that all potential users place on the resource(s) in question s necessary for competent decision making. This report, as one of several detailing the parks in the system hopes to contribute to that economic knowledge. Previous work includes valuation of visitor days to Nopiming Provincial Park in Manitoba (Boxall et al 1996), and for a restricted set of parks that includes Woodland Caribou Provincial Park (Englin et al 1996).

1.3. Report Organization

The report will start with a description of all of the Ontario parks in the system followed by an explanation of the methodology employed. A summary of the results of the field work is contained in Section 4. The report will conclude with an outline of proposed future work and recommendations in Section 5. Separate appendixes contain the detailed results.

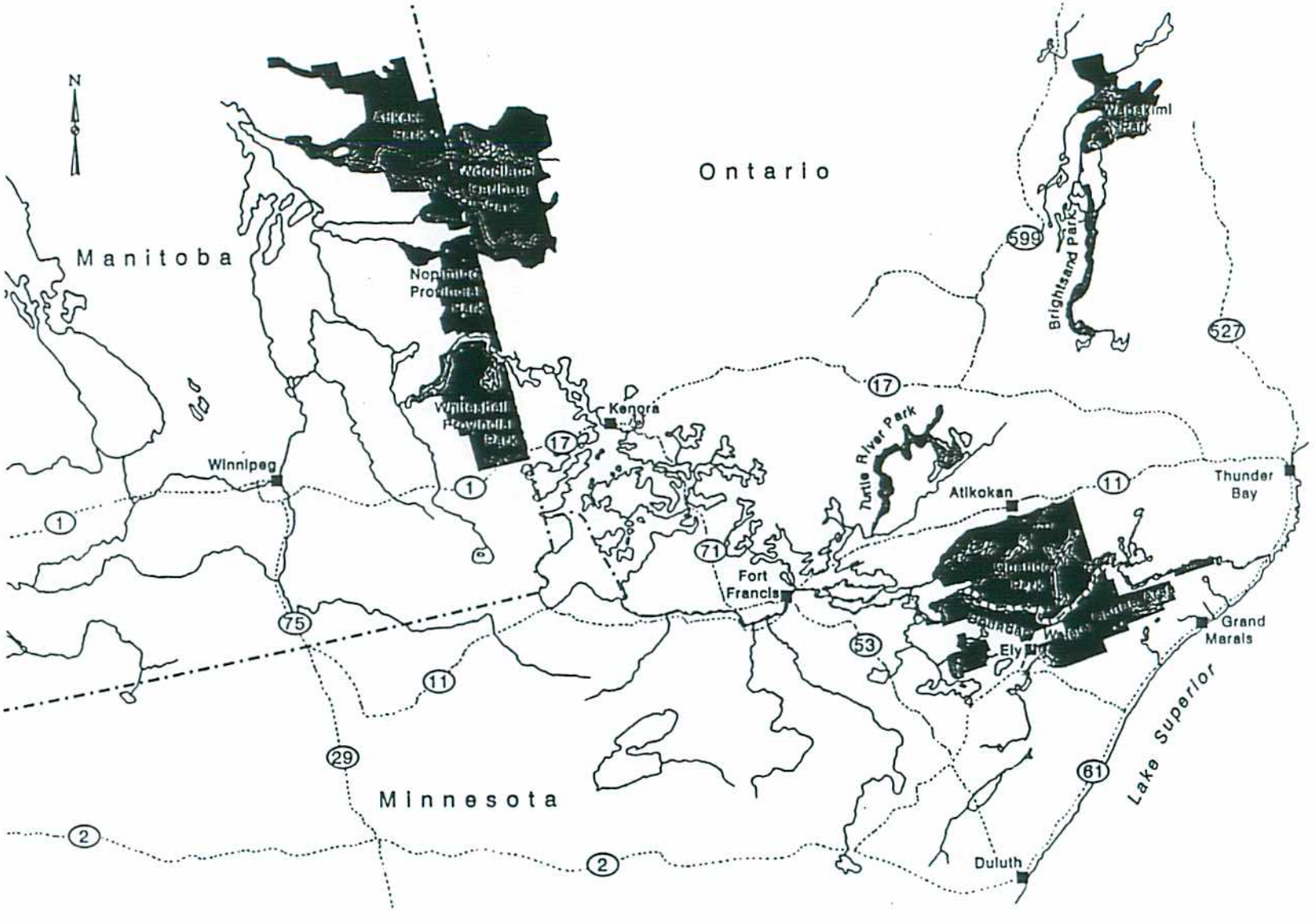


Figure 1. System Map

Section 2. Study Area: Ontario Parks Background Information

Information concerning the Ontario Provincial Parks in the hypothesized demand system is organized in the following fashion. The park name, and geographical location, as well as points of access are contained in the first descriptive paragraphs. These are followed by a brief history of the park's creation and of any size or designation changes since its inception. A brief biophysical synopsis (including such areas as geology, botany, topography etc) of the park follows. The final two sections concern the management regime and other issues concerning the park.

Provincial parks in Ontario are administered by the Parks Branch of the Ministry of Natural Resources. The Ministry is responsible for staffing, supervision of users, public safety, and forest fire control. The Ontario park system, as it existed in 1994, contains six different park designations. The specific designation determines, to a large degree, the type of management in any one park, land use and/or multiple use, and restrictions on various activities. On top of these classifications, parks may be considered operating, or non-operating, which again influences the management and activities. The following brief classification description is taken from the 1995 Ontario Ministry of Natural Resources Provincial Parks Guide. More complete information may be obtained from the Ministry.

Nature Reserve Parks: *Areas to view natural landforms, such as Ouimet Canyon, or rare places that are provided for education and scientific research purposes.*

Wilderness Parks: *Large areas left to nature where visitors travel on foot or by canoe, can enjoy solitude, challenges and get in touch with the world as it was before Europeans arrived.*

Natural Environment Parks: *Are for swimming and campers, and for those who might like to visit a replica of an old logging camp.*

Historical Parks: *Provided for interpretive, educational and research purposes.*

Waterway Parks: *Waterway parks incorporate outstanding recreational water routes with representative natural features and historical resources to provide high quality canoe recreational and educational experiences.*

Recreation Parks: *These provide a general, wide variety of recreational activities such*

as camping, beaches and contact with other users.

Our hypothesized demand system concerns backcountry recreationists, and so only the Wilderness and Waterway parks in the region are included. We start with the three wilderness parks (Woodland Caribou, Quetico, and Wabakimi) then follow with the waterway parks (Turtle River and Brightsands). A summary of important features of these parks is contained in Table 1.

2.1 Woodland Caribou Provincial Park

Woodland Caribou Provincial park is located in Northwestern Ontario (north of Kenora) between Red Lake and the Manitoba border. The map in Figure 1 shows the location of the park in relation to major cities. One road entry is via Vermillion Lake and Red Lake on paved Highway #105, a distance of approximately 250 km from Kenora. There is also a 140 km gravel road directly from Kenora via Redditt to the park. Woodland Caribou Park shares 70 km of its western boundary with the province of Manitoba; this boundary includes sections of shared border with Nopiming and Atikaki parks. While the two major canoe systems are the Bloodvien and the Gammon rivers, the park does have 1600 km of interconnected canoe routes. The present shape of the park is shown by the map in Figure 2.

Woodland Caribou Park is one of the newest in Ontario, having only been designated as a wilderness park in 1983. At 462,000 hectares, it is the fifth largest park in the province. The conservation of the area that became the park began as the Caribou game reserve in 1948. The area was renamed the Irregular Lake park reserve in 1967, the Woodland Caribou reserve in 1972, and the Atikaki Study area in 1974. But this area has a longer history for it had been used by aboriginal peoples for over 9,000 years. It was also the centre of intense fur trade activity in the early years of European settlement. The Bloodvein river system, which starts in the park, provided a route from Lake Winnipeg to Lake Superior. There was strong competition between rival companies for the route and for furs from the area.

The park lies in the central portion of the Canadian shield and its topography has been strongly affected by the Wisconsian glaciation. Glaciation created strewn boulders and widespread moraine. Following glaciation, the entire park was covered by the former Lake Aggassiz. The action of the lake resulted in distinct zonation in the park. The southern half,

which was washed by wave action, is an area of bare bedrock which now supports a dominant jack pine forest. The deeper waters of the Lake in the northern portion created silt and clay deposits which now support mixed and hardwood forests. The park lies in the Nelson river drainage basin, where waters flow to Hudson Bay via Lake Winnipeg, and the Nelson River: the general trend of water flow is east to west.

Although of special interest is the large herd of woodland caribou which stays within the jackpine forest, there is other wildlife in the park that is worthy of notice. For instance, the northern portion of the park with black spruce forest supports a strong moose population. The bald eagle is also common. Other species of distinction include white pelicans and snapping turtles. The primary species of concern to anglers are lake trout, yellow pickerel (walleye), muskellunge and northern pike.

Woodland Caribou Park contains a variety of interrelated natural and cultural features which are considered to be of provincial significance. These include one of the last intact wilderness canoeing resources in Ontario; a hot dry climate that supports an unusually diverse "prairie boreal" forest (in the southern half); one of the largest herds of woodland caribou south of the Hudson Bay lowlands; some of the highest quality recreational fishing; and one of Canada's largest concentration of pictographs.

The pictographs especially deserve attention for they are of both cultural and historical significance. Pictographs are paintings on rock surfaces created by aboriginal peoples. They may be either realistic or symbolic depictions of people, wildlife or mythical creatures. They were used in religious ceremonies, and still have strong cultural importance for aboriginals. Pictographs are usually less than 25 cm in size, and reddish in colour from the iron oxide based red ochre (pigment) used. They are commonly found on vertical cliff faces and close to the water; these locations suggest that they were probably painted by someone in a canoe.

At the time of the field studies in this park there was no management plan in place. It is considered as an operating park with a staff that supervises, collects fees, and patrols it from Red Lake. The staff is not allowed to create trails or erect signage until a management plan is approved. Likewise, there are no designated campsites in the park. Existing sites generally are found near portages, or on islands of larger lakes. Portages are not marked on the ground; however, upon request the province will provide a large scale park map that shows the location

of suggested portages. As well, a number of main base lodges and commercial outpost camps are located within the park. The proposed park plan, which will maintain these commercial operations, will allow all types of users a wilderness experience. A permit is still required for overnight camping in the park unless the user is staying at a licensed lodge, outpost camp, or private cottage. The permits may be obtained from the Ministry of Natural Resource offices at Red Lake or Kenora, or self-registration box at Red Lake. The general rate was $4.25 per person per day. in 1994.

The predominant economic activities surrounding the park are logging and mining. Other regional resource uses include trapping, commercial tourism and Crown land recreation largely associated with fishing and hunting. Another mine may be opening near the southern boundary of the park in 1997 or 1998 which may increase access dramatically.

2.2 Quetico Provincial Park

Quetico Provincial Park is approximately half way between Thunder Bay and Fort Frances Ontario (160 km from Thunder Bay). There is one road entry available from Highway 11 near Atikokan. The southern boundary of the park is the international border shared with Minnesota, USA. This border is also shared with Quetico and the BWCA (Boundary Waters Canoe Area) in the Superior National Forest in Minnesota. There are ranger stations and customs posts at Cache Bay, Basswood Lake (Portage Prairie and Cabin 16) and Lac La Croix for visitors entering by water from the United States.

Quetico Provincial Park was designated a forest and game preserve in 1909, a provincial park in 1913 and a wilderness park in the 1970's. The park presently measures four million hectares. Between 1913 and the present there have been numerous redesignations and amendments both to the park size and to the management regime. Some of these changes have occurred either in response to, or in anticipation of, similar changes in the BWCA. (An excellent description of the history of both Quetico and BWCA is contained in Backes (1991). But the park has an even longer history: the area was occupied by native peoples as early as 10,000 years ago. It also contains waterways that were major voyageur and exploration routes during the European occupation. In fact, one of these routes eventually became the basis of the international boundary between Canada and the United States.

Quetico lies at the southern edge of the Canadian shield - that portion of the shield which contains some of the oldest rocks on the continent. The rock outcrops that occur are quite precipitous, and the lakes are long and narrow. Quetico park exhibits geomorphological features such as large areas of moraine and out wash, which are closely related to the retreat of the last glaciation. As well, the soil formation, which in most places is less than one metre deep, is based on the pattern of glacial deposition. One strong exception to this trend of soil formation is in the Wawiag River area which has very deep clay and gravel deposits. These deposits support a unique Carolinian flora more commonly found in areas much further to the south.

Drainage patterns within the park are haphazard, flowing in all directions around a central highland. Ultimately though, the drainage all flows towards the west; it moves through Rainy River, Lake of the Woods, Lake Winnipeg, and on to Hudson Bay. Quetico is unique in that several of its watersheds do not lie completely within the boundaries of the park. Therefore, activities outside the park can affect water quality within it.

Quetico occupies a zone of transition between the boreal forest to the north, the mixed forests to the south and southeast, and the great plains forests to the west and southwest. But boreal species dominate about 90 percent of the park area. Jack pine and black spruce alone are dominant in 55% of the area, followed by trembling aspen (25%), and birch (10%). Mixed forests species occur sporadically throughout the park, especially on hotter than average micro-climatic areas such as south facing slopes. Red pine and white pine, which seem more abundant than they really are, are most often found in pure stands along river banks. Western forest species that occur include basswood and bur oak.

But both fire and historic logging have had a strong influence on the flora of the park. Approximately 50% of the park area has been burned in the last 100 years and most of the red and white pine was removed during the logging periods. Thus, less than 5% of the forest in the park is over 100 years old, and about 50% is less than 60 years old.

Due to its location and topography, Quetico has many features of special interest. Although the majority of the park does not support large mammal populations, moose and white-tailed deer thrive in cutover and burned areas. Quetico is also famous for its populations of bald eagle and osprey. Both populations still nest regularly in the park and are often seen by

canoeists. Likewise, the lakes in Quetico, which are more prolific than most in the shield region, support larger and more diverse fish populations. Lake trout and yellow pickerel are the principal species in the park. And like Woodland Caribou Park, Quetico contains numerous pictographs. There are other anthropological features worthy of notice, but, as yet, these have not been completely catalogued.

When Quetico was designated as a wilderness park, it was to preserved "in perpetuity for the people of Ontario as an area of wilderness not adversely affected by human activities" (OMNR 1977, p.40). In order to preserve the park, logging and other extraction activities were excluded, general motorboat use was prohibited, and cans and bottles were banned. The motorboat ban was subsequently amended to allow members of the Lac La Croix native reserve use of small motors on a limited number of lakes near the reserve. Logging had been allowed in the park until 1973 and still is actively pursued on the boundaries. The sounds of this logging activity outside the park can still be heard in some park areas, causing distraction to users.

There is a park staff in place near Atikokan which controls entry, patrols, and collects fees. In 1994, the basic fees were $4.25 per person per day. There are no designated or developed camping sites. Entry quotas exist throughout the park by entry point, and reservations may be made in advance. Once a recreationist has gained entry there is no restriction on movement or length of stay. The majority of visitors are from the United States and enter by water from in or near the BWCA.

2.3 Wabakimi Provincial Park

Wabakimi Provincial Park is located near Armstrong Ontario, approximately 300 km north of Thunder Bay. Road access is from Thunder Bay along Highway 527. It is also often accessed either by rail from the Allanwater Bridge area or by water from Brightsands Park. There are no roads that directly touch on the park boundaries. Wabakimi Provincial Park, which is presently 155,000 hectares in size, was created in the 1970's.

Lying within the boreal region, it shares similar geomorphological features with Woodland Caribou. The soil is generally very thin, with extensive rock outcrops. Vegetation is primarily black spruce and bog undergrowth in the wet areas, and jack pine to lichens on the drier outcrops. The fauna is typically boreal, and includes a small herd of woodland caribou.

In 1994, Wabakimi was considered a non-operating park and no management plan was in place. Its status as non-operating meant that there was no designated staff in the park though some supervision did exist through the Ministry of Natural Resources office in Armstrong. (The designated park manager works in Dryden Ontario). The canoe routes are not maintained. There are no park user fees, and Canadian residents are free to enter and use the area. Non-Canadians must pay a $10.00 per night fee that exists for all crown land camping by non-residents. Within or near the park is one lodge, and 12 oupost cabins with fly-in service. In 1996, an expansion was approved to bring Wabakimi Park to the total size of 250,000 hectares. If carried out, this expansion would absorb a large part of the present Brightsands park. Despite the objections of logging interests in the area, this expansion has been lobbied for several years.

2.4 Brightsands River Provincial Park

Brightsands River Provincial Park, which is located 225km from Thunder Bay, is reached by first taking highway 17 and then Graham road where there are three designated access points. There are large lakes along this canoe route and quick drops in elevation. The park covers 41,250 hectares and is 130 km long. This distance spans the beginning of the park at the north end of Pakashkan Land to the end at Kawawegama Lake near Allan Water on the Canadian National Railway (CNR) line. Links exist to Wabakimi park via Allen Water River, and to Kopk River Provincial Park via the Kashishibog river. The Park was only formally established in 1989. The area has a history as an active logging site in the 1920's and 1930's and logging still continues today in the surrounding areas.

The entire park lies on the Canadian shield. One of its outstanding features is a 80 meter high diabase dike at the south end of Kawaweogama lake which was formed about 1,800 million years ago. Glaciation is responsible for the park's other geographical features. These include moraine, till deposits, beaded eskers, and certain features of Lake Agassiz such as raised beaches, wave-cut terraces and lacustrine sediments.

The vegetation of Brightsands is typical of the boreal forest and consists mainly of jack pine, trembling aspen and white birch in the uplands, and black spruce and tamarack in the lowlands. Exceptional white and red pine stands occur here. Although more common to the Great Lakes and St. Lawrence region, marsh and wet meadow communities can also be along

the waterway. As well, a few examples of open bogs can be found, most notably at the north end of Brightsand Lake. As for animal species, there is a herd of woodland caribou with its zone inside the park; this herd is one of the last in this region of Ontario. Like Woodland Caribou and Quetico provincial parks, pictograph sites have been found. Of the ten pictographs discovered in Brightsands, eight are on Moberly Lake.

The park is administered from the MNR Office at Ignace but there is no existing management plan. An issue to be dealt with is unauthorized access which can lead to shore destruction and overfishing. Commercial tourist operations exist, and motorboats are permitted throughout much of the park. The fee structure is like that at Wabakimi, in which only non-residents must pay for camping (Crown land permit).

2.5 Turtle River/White Otter Provincial Park

Turtle River/White Otter Lake park runs between the towns of Mine Center on Highway 11 and Ignace on Highway 17. The mid section is accessed from Highway 622 (the Bending Lake Road) where it crosses the river, numerous logging roads, and adjoining canoe routes. 40,052 hectares in size, and 160 km long, the park mainly consists of chains of links joined by quick drops in elevation, some large lakes, and some whitewater opportunities. The park is located in a transitional zone between the boreal forest and the Great Lakes-St Lawrence old-growth pine. The southern reaches of the river exhibit large marshes and areas of wild rice. The river is part of the Lake of the Woods drainage system and flows southwesterly into Rainy Lake. A small portion of the north end of the park is part of the English river system and flows north.

Although the park was only officially designated in 1989, it has a very complicated history. As early as 1918 the historical value of White Otter Castle was recognized and a three acre site was set aside in 1939. White Otter Castle, which annually draws 35,000 visitors, is a four story log cabin built singlehandedly by J. McQuat in 1914. White Otter Lake was declared a wilderness reserve in 1959 and a future National Park in the 1970's. As well, there are pictograph sites -- the majority of the 24 sites located on White Otter Lake. It is estimated that most of these were painted between 700 and 1600 AD. (It is unfortunate that many of the park's prehistoric occupation sites are also the sites of present day camping. Modern intensive recreation use could potentially damage these sights through erosion and compaction). Furthermore, the

recommendation to make Turtle River a waterway park was made in 1983 when the park was 40,000 hectares.

Although there are numerous outpost camps and some private recreational camps, these are to be phased out. A number of trappers maintain cabins for winter use only. There is also heavy use of the park corridor by snowmobilers in winter. The main Canadian users of the park live in Thunder Bay, a 3 hour drive from the park, whereas US users are predominantly from the states of Minnesota, Wisconsin, Michigan, Illinois and Iowa.

The park management plan, when finished, will try to incorporate features which also will use the tourist potential of the park to attract visitors to the surrounding towns. The future plans must address several resource use issues. For example, the Wabagoon Lake Native Band has proposed to harvest wild rice in the Jones and Eltrut Lakes areas. This has some people concerned. Other issues are the present permission to use motorized craft (winter and summer), the park boundaries, the number of access points, and hunting. As well, present users are worried about potential fees and quota restrictions for the park. [Atikokan users, in particular, feel strongly about this, knowing first hand from the loss of freedom they feel that Quetico has placed on their activities (MNR 1992).] The park is within three separate FMA areas. Though the park is presently excluded from harvesting, signs of historic harvesting are evident, especially near White Otter.

Table 1. Summary of Park Attributes

	Woodland Caribou	Quetico	Wabakimi	Turtle River	Brightsands
Inception date	1987	1977	1983	1989	1989
Size (hectares)	462,000	4,000,000	155,000	40,000	41,000
Estimate of annual use[1]	1,500	24,000	unknown	unknown	unknown
Backcountry use or entry fee[2]	$4.25 per person per day	$4.25 per person per day	Canadians free; others $10/day	Canadians free; others $10/day	Canadians free; others $10/day
Organized campgrounds present	No	No	No	No	No
Roads that access park interior	No	No	No	Yes	Yes
Motor boats allowed in park	Yes	Yes, limited	Yes	Yes	Yes
Motor boats restricted to certain areas	Yes	Yes	No	No	No
Resource extraction permitted	No	No	No	No	No
Tourist guiding along routes	Yes	Yes	No	No	No
Tourist lodges and/or outpost cabins[3]	Yes	Yes	Yes	Yes	Yes

[1]Best guess estimates by park managers of total users, including backcountry and campgrounds where applicable. Only Quetico and BWCA based on actual registrations.

[2]This figures are for 1994, and some have changed since that time.

[3]An outpost cabin is an erected building that paying customers are flown into for short time periods. In most cases, they are equipped with sleeping and eating facilities, motor boats and docks, but are not staffed.

Figure 2. Outline Map of Woodland Caribou Provincial Park

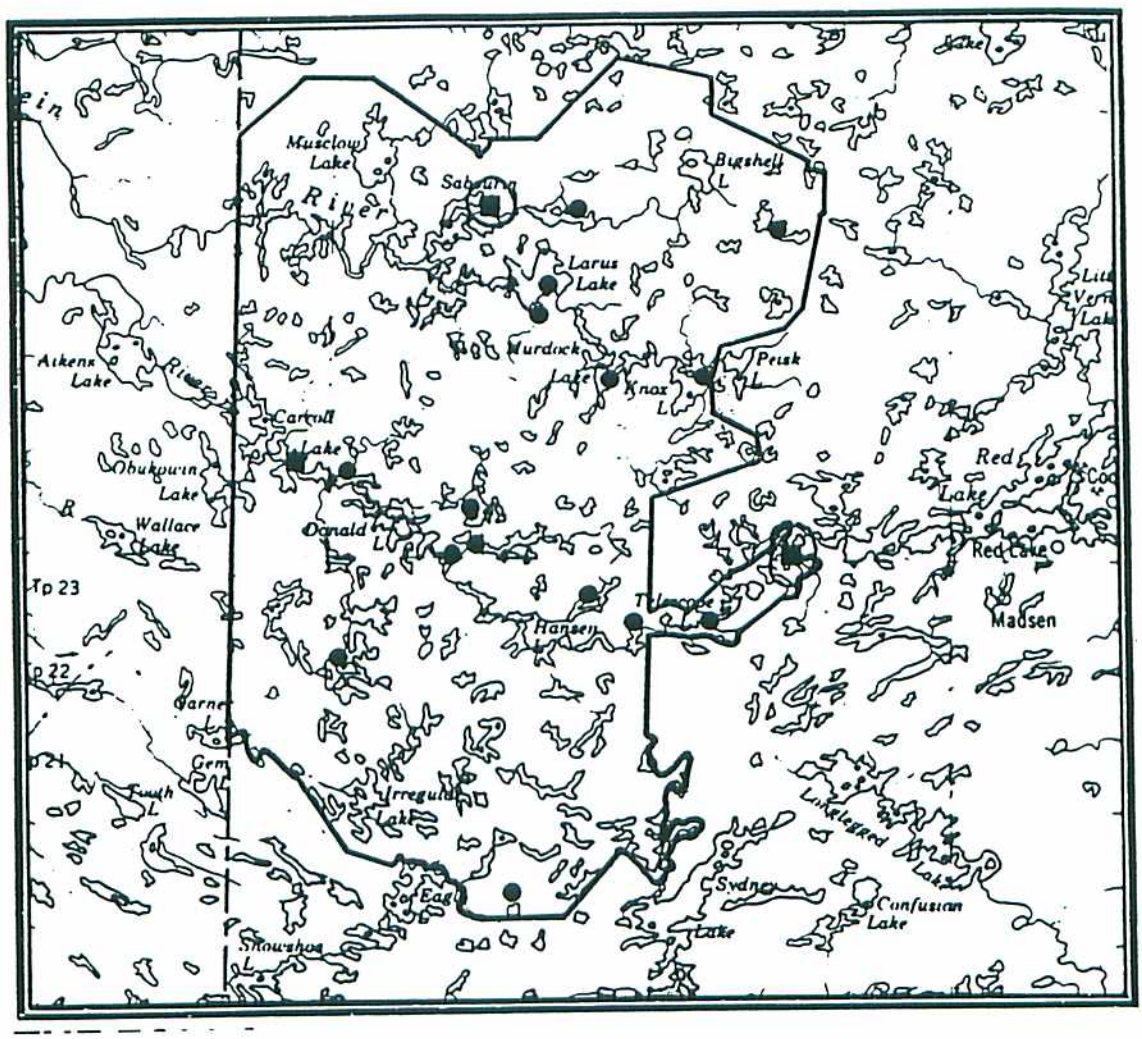
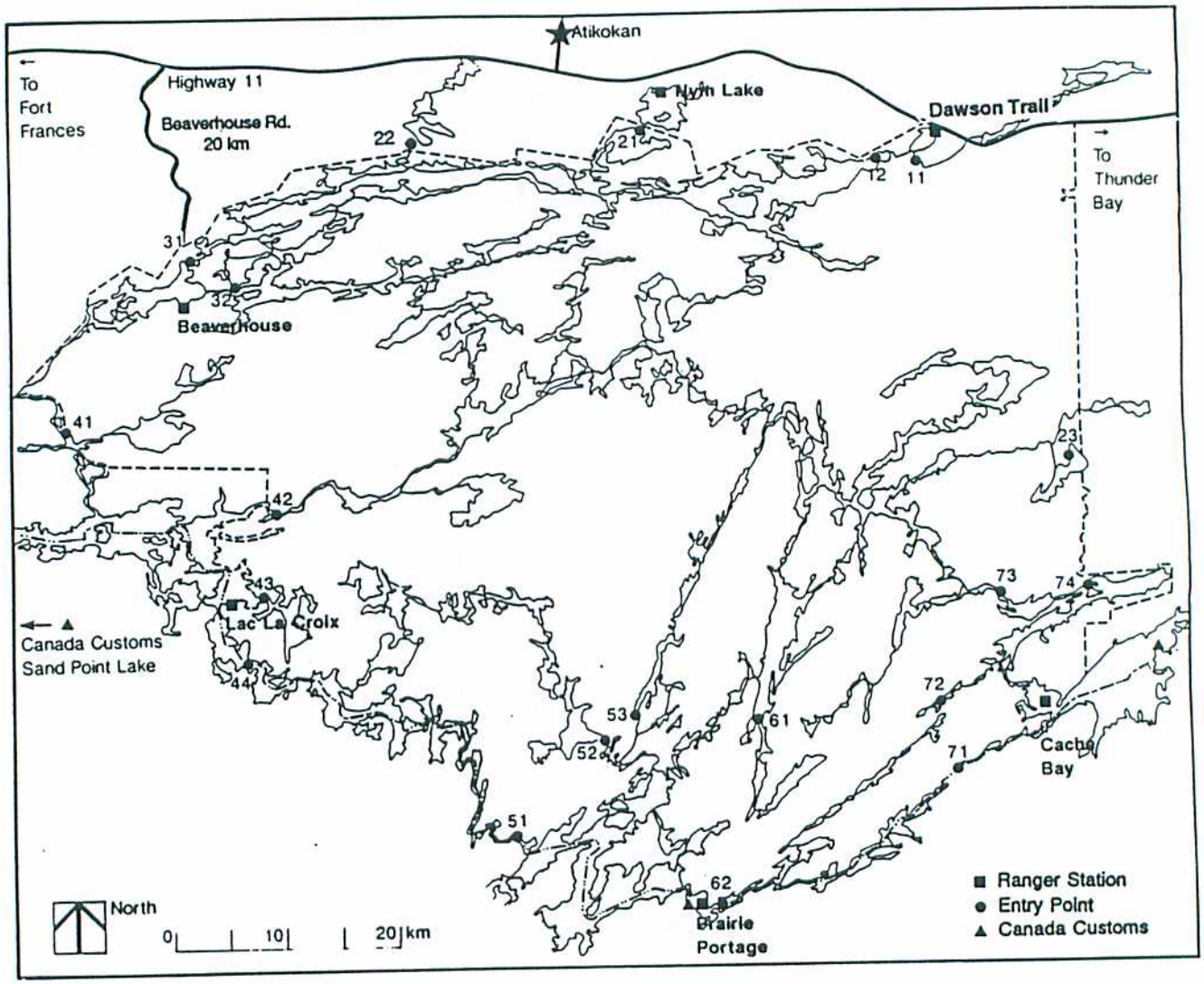


Figure 3. Outline Map of Quetico Provincial Park



Section 3. Methods

To create a model of how people use the parks, two types of information are required. The first is socio-economic information about the users, and the second is information concerning their movements within the park. This personal information can later be combined with census data to provide general information about income and education levels. A user registration was created to achieve this goal, and self-registration kiosks were also proposed. The second necessary information is bio-physical data about the canoe routes within the park. This data allows modelling about route selection and the features that are attractive to canoeists. This information collection is very labour intensive for staff is required to travel the actual routes.

3.1. User Registration System

Activities to create a user registration for the parks were initiated in the fall of 1993 and continued in the spring of 1994. To achieve this end, a form (which would be analogous to the form used in Manitoba in 1993) was created for each of the parks. The work which went into creating the Manitoba form is outlined in Watson et al. (1994).

Unfortunately, due to various circumstances, the form was only put into use in Woodland Caribou park. For example, in Turtle River, Brightsands and Wabakimi parks, the placement of on-site registration boxes was not possible due to lack of manpower. As well, the form could not be included with an existing system since none of these parks had an existing registration system. The absence of a registration system is mainly due to the lack of fees in these parks. The park manager for Wabakimi did include the form in the response package. The form was made available to the OMNR. When people requested information from the OMNR, they were mailed back a package which contained the necessary information about the park (brochures, maps, safety regulations) and the form. Five people completed the form and mailed it back.

Quetico park had an existing fee collection system and entry points that were supervised. However, the park superintendent felt that as there had already been several surveys carried out on users of that park in the previous three years, it was not advisable to undertake another one. Nonetheless, the park staff did provide the study team with registration information for the years 1993 and 1994. In compliance with the privacy provisions of the Ontario's *Freedom of Information Act* this information had the names and addresses of the users deleted. However,

the home town of the user was included.

In Woodland Caribou Park, the study registration form was used in conjunction with the existing fee collection system. It was issued at the registration counter of the Red Lake Natural Resources office, and at the self-registration kiosk outside the building. As well, two on-site boxes were put in place at the primary entry points near Leano and Douglas lakes. The form, as shown in Figure 3, provides basic socio-economic information about the participant and the group, past experience in Woodland Caribou and other parks, as well as the route chosen. The back of the page also included a map of the park, where the registrant could trace the route travelled. Since all users must register and pay a fee, comparison of completed forms with the fee envelopes showed that a complete census of users was achieved.

The information from the completed forms was entered into a PARADOX (copyright Borland Corporation) database for further analysis. Park staff allowed the entry of user information from the years 1991 to 1993. This information was compared with that gathered in 1994. This information, minus the names and addresses, is contained in Appendix A. The coding arrangement is shown in Table 5 in Annex A. The attributes, with the exception of some administrative details listed, were taken directly from the registration survey questions. These include a unique identification number for each form, unique identification number for each individual (several had taken more than one trip), a home town code, and a cross-reference to the rivers travelled. To include the information requested on the back of the form, the presence or absence of a line trace of the route is noted, as well as campsite location (if included).

3.2. Biophysical Data Collection

Given that no user information could be obtained, collection of bio-physical data was also restricted to Woodland Caribou Park. Published route guides already exist for Quetico park, (Beymer 1985 for example) and some limited information concerning Wabakimi park was provided by students of the School of Outdoor Recreation, Parks and Tourism of Lakehead University. A park checklist was also sent to either the manager of each park, or someone knowledgeable of that park. This checklist asked details about the size of the park, special features, and perceptions of congestion.

To collect information in Woodland Caribou Park, a student was hired and based in Red

Lake for the summer period. This student worked with the park staff doing routine portage maintenance work as well as carrying out the bio-physical data survey. Other park staff working on patrolling and route maintenance also assisted with this survey.

Checklists of bio-physical features for portages, campsites and overall route had been created for Nopiming in 1993. However, the staff of Woodland Caribou Park already had similar checklists that were used for the on-going patrolling of the park. The checklists are shown as Figures 6 and 8 below. The comparable checklists for Manitoba are shown as Figures 5 and 7.

Because the Woodland Caribou checklists were similar to those of the study team, their use was appropriate. By doing this, the staff at Woodland Caribou could also maintain their own list of park attributes. The information from these forms was transcribed to a database similar to that used in Manitoba. Because of this work, future comparisons of route features between Woodland Caribou and the Manitoba parks will be possible.

Campsite attributes were also entered into a PARADOX database using the coding format shown in Table 6. The contents of the database of campsite attributes is shown in Appendix B. The categories of these attributes are identification, location, shore, terrain features, exposure, and special features. Identification includes a unique number, SITE#, and a cross-reference number (ROUTE#) for the canoe route along which the site is found. The location variable GRIDREF places the site geographically. A straight line route was drawn from start to finish for each route, and this line was called the "natural canoe route." If a site is in a bay, or inside a channel off this natural route, it is seen to be a special attribute: this is because it may require extra effort to reach this site and because it may have a higher level of privacy. The attributes ONROUTE and OFFROUTE capture these features. These attributes have still to be determined for sites in Woodland Caribou.

The variable TERRAIN suggests the topography in the general area of the site. HITEMAIN and HITE2ND identify the placement of the site in relation to the shore. The placement of important features within the site include FIREBOX and CAMPFIRE. The category also includes attribute -- AREASITE and TENTSPOT -- which describe the size of the campsite.

Exposure describes the view *from* and wind exposure of many of the campsite features. Wind exposure can be either positive or negative, depending *on* what the field staff considers is

the canoeist's point of view. This point of view need not be the same for all features. For example, high wind exposure because it deters biting flies and mosquitoes may be considered good in the main area. However, low exposure may be preferred in the tenting area because it protects from the elements while sleeping. The OPENSITE attribute describes both of these features.

Portages and their degree of difficulty may likewise be important to users. The first variable in the attribute list gives a unique number to each portage and cross references it to the route on which it is located. The next category of attributes determines the physical location of the portage and places it within the general topography. This is followed by factors delineating the difficulty of the portage and some idea of various amenities found within it. Table 7 shows the coding scheme for this database. The table in Appendix C provides the contents of this database of attributes. The shore category describes the ease of accessing and landing at the site. The variables LANDING and LANDWIDTH describe these respective features whereas SIDE/SIDE identifies the security of the canoe from the elements on the shore. LENGTH, WIDTH, WET & DRY are attributes that describe the portage trail.

Lastly, the category of special features depicts any attribute present that may contribute to making one site unique and different from others along a route. Some of these outline the obstacle to be portaged around such as FALLS, or ROCKDAM, or the visual aspects of the surrounding area, in SCENIC.

Figure 4. Survey Form for Woodland Caribou Park

WOODLAND CARIBOU PROVINCIAL PARK
BACKCOUNTRY SURVEY

Thank you for taking the time to complete this form. The information will help the Ministry of Natural Resources and the Canadian Forest Service understand how you use this area and enable staff to better manage backcountry water recreation routes. Note: This information is not for search and rescue purposes. Please ensure that you tell a family member or friend which route you are travelling and when you are expected back home.
Opinions expressed become part of the public record unless specifically requested otherwise.

1. Group Leader's Name ..... (First / Middle Initial / Last)
2. Group Leader's Mailing Address ..... (Number / Street / City/Town)
..... (Province/State and Country / Postal/Zip Code)
3. Number of People in the group? ☐
4. How would you describe your group?
☐ Family ☐ Friends ☐ School/University ☐ Youth
5. Type of watercraft?
☐ Canoe ☐ Canoe with motor ☐ Boat and motor ☐ Other
6. Number of watercraft in the group? ☐

7. Trip start date? ..... (day month year) 8. Expected date of trip completion ..... (day month year)
9. How many times have you visited this route in the last ten years?
☐ None ☐ Once ☐ Twice ☐ Three ☐ Four ☐ Five or more

10. Which routes have you used in the park in the last ten years?
☐ Sabourin River ☐ Bloodvein River ☐ Other (specify) .....
☐ Gammon River ☐ Simeon Creek .....
☐ Optic Lake/Hansen Lake ☐ Haggart River .....

11. Which of the following parks have you visited the last ten years?
☐ Quetico ☐ Bright Sands ☐ Other (specify) .....
☐ Turtle River ☐ Nopiming .....
☐ Wabakimi ☐ Whiteshell .....
☐ Boundary Waters ☐ Atikaki .....

12. What was the primary purpose for your visit to the park?
☐ Canoe trip ☐ Motor boat trip ☐ Other (specify) .....
☐ Fishing ☐ Camping .....

13. What means of transportation did you use to access Woodland Caribou park?
☐ Land (road) ☐ Water ☐ Water (from Manitoba) ☐ Air
☐ Other or Combination of above (specify) .....
14. It is very important to learn what specific water recreation routes are used in Woodland Caribou park. Please refer to the map on the back of this survey and trace your intended route from the staging area. Also, indicate with an ⊗ where you intend to camp.

Figure 5. Campsite Attribute Checklist for Manitoba

1. Location

a. Is the campsite (For designated campsites) where the canoe route map has it marked? (Y/N) What is the 6 figure grid reference of the campsite (designated and non-designated) from the topographical map. _____

b. Is the campsite easy to spot from the water (Y/N)

c. Is the campsite along the natural canoe route (Y/N). If no, give an appraisal of the distance (in metres) from the natural canoe route. _____
Is the campsite on the main shore, a peninsula, or on an island?
(circle one)

d. What is the height of the main campsite area above the water level, in meters._____ (Some sites may have a "secondary plateau", make note of these also) _____

e. Is the metal and concrete firebox on shore, on rocks, in the main camp area (circle one, note if absent). For non-designated sites, location of campfire rock rings._____
Are there other campsites within 300m of this campsite, (Y/N); and if so, is there a clear line of sight, (Y/N) or path (Y/N) between the two?

2. Exposure

Give an indication of the wind exposure of the following general areas of the campsite, (i.e. wind exposure from how many directions)
Beach/landing area _____
Firebox/cooking area _____
Tent sites _____
General space _____

3. Space

a. Give a rough indication of the size of the open area created at the campsite (i.e. 10m by 20m etc) _____

b. Describe the openness of the trees in the immediate area; grass, few trees, tall trees with no undergrowth, heavy undergrowth.

c. Number of tent sites available, under "normal" and "shared/crowded" conditions _____

d. Size of landing area, number of boats/canoes that could be simultaneously landed. _____

e. Is there room on shore near landing area for beaching boats out of the water (Y/N)

4. Amenities

a. Are there toilets provided (Y/N). If yes, are they easily located, and agreeable?

_____

b. List any structures created by previous users, such as fish cleaning tables, docking anchors, tables, supplementary campfire rings etc.

_____

c. Describe the view to other areas, (i.e. long view of lake and other shoreline, view less than 100m, no view of sky etc.)

_____

d. Has there been a fire or forestry cutting in the area in the last 10 years (easily visible) (Y/N)

e. Is there readily available fallen debris for firewood (Y/N)

f. List any particular characteristics (rock outcrop to climb, plentiful berries, waterfall nearby etc)

_____

g. Is the site "generally clean", without obvious signs of "rough toilets", fish parts, or long term litter of tins etc (Y/N)

5. Vegetation

a. What are the predominant tree species in the immediate area? 1_____, 2_____, 3_____

b. What are the predominant tree species in the distant view? 1_____, 2_____, 3_____

c. list any understory, flowers and shrubs noticed as common in the area_____

d. Give a rough indication of the spacing and height of the trees in the main area, and the surrounding area _____

e. Is the surrounding area easily penetrated (Y/N)

f. Are there numerous fallen trees in the area (Y/N) Are there signs that previous users have been cutting trees (this year; and/or previous years) (Y/N)

_____

Figure 6. Woodland Caribou Campsite Description Sheet

Campsite Number:_____ Date:_____

Campsite faces_____ (direction looking toward water)

Landing/Launching

Number of canoes to land side by side _____

Slope at Landing 1 2 3 4 5
FLAT HILLY VERY STEEP

Condition at pull-out area: marshy _____ some vegetation _____
sand _____ rock_____ clear _____

Ease of pull-out: 1 2 3 4 5
EASY SOME OBSTRUCTIONS VERY DIFFICULT

Campsite:

Slope 1 2 3 4 5
FLAT HILLY VERY STEEP

Vegetation cover: _____% rock _____% soil
_____% grass _____% moss _____% other

Number of tent sites _____flat _____ some angle

Existing fire pit area: No _____ Yes _____
rocks _____ other (specify) _____

Availability of fire wood: little _____ some _____ abundant _____

General soil compaction (impact): little _____ evident _____ obvious _____

Shelter from weather: little _____ some _____ abundant _____

ON REVERSE PLEASE SKETCH A MAP OF THIS CAMPSITE SHOWING DETAILS OF PROXIMITY OF SITE TO WATER - TENT AND FIRE PIT ORIENTATION ETC ....

Remarks: _____

_____

_____

_____

_____

Figure 7. Manitoba Parks Portage Description Sheet

ROUTE #: What river system is the portage on _____

Grid reference of start (6 figure)

Grid reference of endpoint

Time of arrival at start of portage

How much room is there at the landing (# of canoes land at once)

Is there a portage trail

Was the portage easy to find

Which side of the river is it on: North _____ South _____ East _____ West _____

How wide is the path ____very narrow ____canoe width ____wider than canoe

What is the general topography ____flat ____rolling ____steep points

Describe the path surface ____rock ____grass ____dirt

What is the dominant tree species

What is the next most abundant tree species

What is the dominant shrub species

What is the next most abundant shrub

What is the length of the trail in meters

What is the water feature the portage goes around ____shallows ____rapids ____falls

What is the vertical drop of the waterfall or rapids ____meters

Rate the cleaniliness of the portage (1 to 5, 1 = dirty, 5 = clean) ____

Figure 8. Woodland Caribou Park Portage Description Sheet

Portage Number: _____ Date: _____

Portage from: _____ To: _____

Landing: clay _____ sand _____ muck _____ rock _____ grass _____

Maximum number of canoes to land side by side: _____

Approximate width of land cleared: _____ meters

Notes: _____

_____

Launching: clay _____ sand _____ muck _____ rock _____ grass _____

Maximum number of canoes to launch side by side: _____

Approximate width of land cleared: _____ meters

Notes: _____

_____

Trail: Length _____ Average width _____

Wet _____% Dry _____%

Number of existing obstructions (not manually removeable): _____

Describe obstructions: _____

Slope: 1 FLAT 2 3 HILLY 4 5 VERY STEEP

Obstructions: Falls _____ Rapids _____

Dam _____ Lake to Lake _____

Other _____

Approximate water drop if any: _____meters

Scenic Value: High _____ Average _____ Low _____

Campsite: No _____ Yes _____ Located _____

Note any unique features of this portage: _____

_____

Remarks: _____

_____

_____

Section 4. Results

This section contains a summary of the results of the field work in the Ontario parks where information was collected. Detailed databases of this data are contained in the Appendixes.

4.1. Woodland Caribou Visitors

Analysis of the existing data for visitors shows a dramatic increase in use over the four year period which was examined; this is, use expanded from 19 groups in 1991 to 123 groups in 1994. For the period, the average group size in Woodland Caribou was 3.81. Total visitation in 1994 was less than 500 persons. But these figures are very small in comparison with those from Quetico park, which showed an average of about 5,000 groups in 1993 and 1994. (See Table 5 for a comparison of group visits to Woodland Caribou and other parks in the system). Table 5 originally appeared in Boxall et al (1996), which is a more detailed comparison of Woodland Caribou, and the three adjoining Manitoba provincial parks.

Visitors to Woodland Caribou are mainly Americans, with 23% from Minnesota, and a further 41% from other US states. Only 26% of the visits were from Ontario residents and 8.7% from Winnipeg. Of the Ontario visitors, the majority were local residents. These numbers are similar to Atikaki Park in Manitoba in one important manner (see Table 4); the visitors from Minnesota also make up roughly one quarter of the visitors to Atikaki. The difference is in the strong percentage of Winnipeg users. This percentage is nearly half in Atikaki whereas it is low in Woodland Caribou. Although Quetico also has nearly one quarter of the visits from Minnesota, it also has a very large percentage of users (over half) from other US locations. The majority of visitors (roughly 75%) had only taken one trip to Woodland Caribou during 1993 and 1994. Less than 1% had taken four or more trips.

Because of the growth in visits to Woodland Caribou over four years, it is useful to determine if these recreationists have been to other parks in the past. This information leads to further estimates of whether or not these recreationists have been forced to move due to entry limits or to congestion. Over 40% of users had been to Quetico and over 30% to the BWCA in the past. Wabakimi and Whiteshell had been visited by nearly 10% each whereas visits to Turtle River and Brightsands were minimal or non-existent.

4.2 Physical Attributes of Woodland Caribou

Woodland Caribou park lies in the upper reaches of a watershed that eventually drains into Lake Winnepeg. The nature of the topography means that there are a great many lakes and streams that are either interconnected, or are only separated by a short distance. In such a system of lakes and streams, it is very difficult to define specific canoe routes because at each succeeding branch the options multiply. It is possible to reach almost any section of the park from a given start point. This interconnectedness of waterways is very different from the Manitoba parks in the system. In Manitoba, the rivers have developed distinct courses, with lakes along the way. It is generally not possible, or not practical, to move from one river system to another except by motor vehicle. Therefore, the routes in Manitoba are by force more linear than in Woodland Caribou park. In Woodland Caribou, it is very easy to make a loop, without ever backtracking, and arrive back at the original startpoint. In the Manitoba parks, one must either retrace the route, or have a vehicle at each end of the route.

As well, there were not enough visitor registration forms received with a route traced to be able to state with certainty which are the most popular "routes" taken by visitors. For these reasons, routes have not been defined in this report. The tables of attributes in Appendices B & C mention "routes" & "sections". These sections correspond to the trips taken by the park and survey teams, to collect information about park features. However, it is still possible to make certain general statements, and comparisons with features in the Manitoba parks, without defining routes.

In general, campsites tend to be similar in size, and location to the Manitoba parks. The type of location used as a campsite is mainly determined by physical attributes, and the comforts provided by these attributes. The group size in the respective parks is not sufficiently different to cause variation in the size of the campsites. However, campsites do tend to be farther apart in Woodland Caribou than in the Manitoba parks. This is probably due to the present level of visitation more than any other factor.

Differences in portages between Woodland Caribou and the Manitoba parks, like the routes, is due to topography. There are many more portages between watercourses in Woodland Caribou than in Manitoba. As well, the portages along the routes tend to be slightly longer, relating to lower water flow rates.

Table 2. Visits to Woodland Caribou Park, 1991-1994

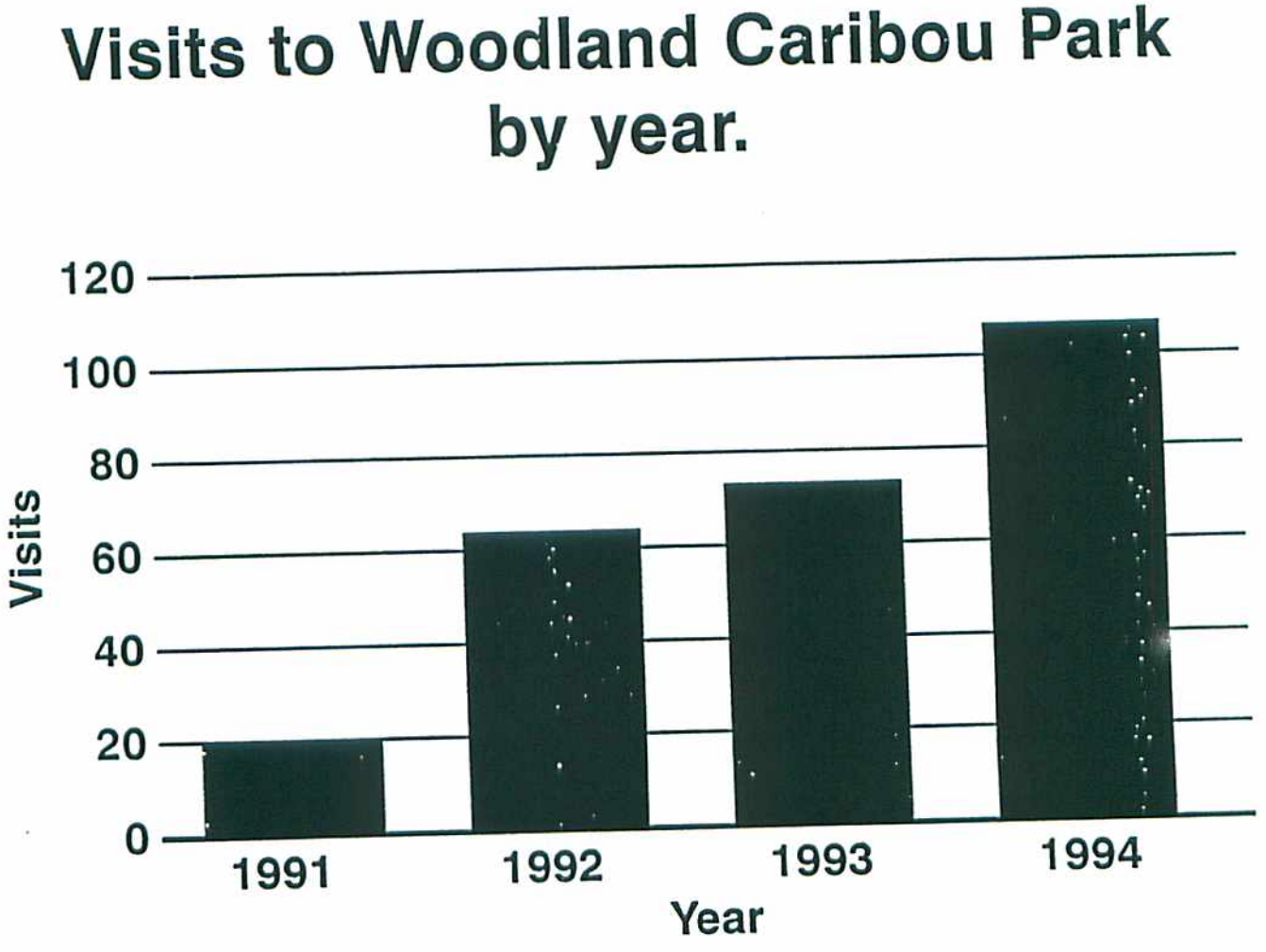


Table 3. Visits to Parks in the System

	Number of permits or on-site survey returns			
	1991	1992	1993	1994
BWCA[1]	26,368	27,023	28,593	27,117
Quetico Park[2]	n/a	n/a	5097	5097
Nopiming Park[3]	258	249	389	272
Whiteshell Park[3]	n/a	n/a	81	253
Atikaki Park[3]	n/a	n/a	57	37
Woodland Caribou Park[4]	19	63	78	123

[1] BWCA data comes from overnight visits and was gathered from an information bulletin provided by the US Forest Service. This information represents numbers of groups.

[2] Quetico data is approximate because it comes from a database of compiled permits from the 1993 and 1994 seasons. The numbers represent groups, not individuals, and the mean group size is 4.05 individuals/group.

[3] Nopiming information based upon data collected by Manitoba Natural Resources for 1991 and 1992. Whiteshell and Atikaki information for 1991 and 1992 was not collected by Manitoba Natural Resources; however, some information at Whiteshell for 1993 was obtained but is incomplete as a formal registration system was not implemented by the authors. Note that this data represents the numbers of groups and not individual visitors. Mean group size based on the survey returns for Nopiming is 4.03 individuals/group, 4.41 for Whiteshell and 5.93 for Atikaki.

[4] Woodland Caribou data was obtained from an inventory of entry permits collected by the Parks Department of Ontario Ministry of Natural Resources. This information represents the numbers of groups; the mean group size is 3.81 individuals.

Table 4. Origins of Park Visitors

	Nopiming (Manitoba)	Atikaki (Manitoba)	Woodland Caribou	Quetico	BWCA (Minnesota)
Winnipeg	69	38	9	0	
Manitoba	26	11	1.5	1.0	
Ontario	1.1	0	26	11	
Canada	0.7	0	0	.5	
Minnesota	2.21	24	23	21	66
USA	0.7	27	40	67	25
Europe	0	0	0	0	
Total	100				

Section 5. Future work, and recommendations

It has been shown, despite the limited scope of the field work conducted, that there is a need for information about users, their perceptions, and their requirements in order to conduct planning of parks and of the regional system in this part of Canada.

Take the case of Quetico Park. Because growth in visitation to Quetico is unlikely (due to entry restrictions), the growth exhibited in Woodland Caribou will probably continue. Preliminary information for 1996 suggests that the growth in visitation has continued. It is significant that there is already a strong United States component in both parks. It is feasible that the non-Minnesota visitors to Quetico will see Woodland Caribou as the best alternative if they cannot get an entry registration in Quetico. But these newer users will have different requirements than the Red Lake locals who are currently strongly represented in the user group.

Future work will endeavour to address these issues and problems. Presently a system model of the four parks for which data exists (Atikaki, Nopiming, Whiteshell, Woodland Caribou) has been completed, (Boxall et al 1996b, and Englin et al 1996). This model uses a "system of equations" approach to determine the value of parks to users. This approach uses variables which are based on the characteristics of individual users. As well, a zonal systems model of five parks (the above four along with Quetico) is currently being attempted. This model too uses a "systems of equations approach" with the variables based on "average" characteristics of the home town (zone) of the users.

In addition, a questionnaire is to be mailed to users of Quetico and Woodland Caribou Parks in September 1996. This questionnaire purports to better determine the experience, perceptions, and desires of the present users of these two parks. The questionnaire will include a "choice behaviour" question which eventually could be used in the valuation of park (management) features. Continued cooperation with OMNR parks and their regional staff will be necessary in order to disseminate the results and findings of these studies and potential future ones.

One of the recommendations of this study is better coordination between the staffs of the various parks: especially advocated is improved coordination between Woodland Caribou and adjacent Manitoba parks. Coordination would allow different parks to offer different experiences. And such a program of cooperation would immediately benefit the recreationist. For example,

a recreationist unable to obtain entry to Quetico could be offered a number of alternatives by the newly informed park staff.

This study also endorses more specific recommendations. It advises a reworking of the registration process so that better and more complete information can be collected. Valuable information can also be obtained from the occasional surveying of users of the "smaller" parks such as Turtle River and Wabakimi. Lastly, a suggestion is made for increased staff at Woodland Caribou Park.

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Annex 1

Description and Explanation of Attribute Variables

Table 5. Description of Variables and Codes for the Survey Database		
NAME	DESCRIPTION	NUMBER CODES
FORM#	Unique Identification number for each survey form	From survey forms
PERSON#	Unique identification number for each individual	Created by study team, can be used on several forms for same person
STARTPT	Source or location where survey was collected	no number code, list name
PRENOM	First Name	no number code, list name
LASTNAME	Last name	no number code, list name
ADDRESS	Street address	no number code, actual
CITY	City	no number code, actual
PROV	Province	no number code, list name
POSTCODE	Postal code	no number code, actual
COUNTRY	Country of origin	no number code, list name
DISTCODE	Home location identifier	Created by survey team
PARK	Park for survey form, for integration with information from other parks	4= Woodland Caribou
YEAR	Year missing not allowed	No code, list actual
GRPSIZE	Group size, Actual number	No code, list actual except -9= missing
GRPTYPE	Group type	1= Family 2= Friends 3= school/university 4= Youth 5= Solo (group size = 1) 6= Combination of 1 & 2 7= work group -9= missing response

BOAT TYPE	Type of watercraft	1= canoe 2= canoe with motor 3= motor boat 4= other 5= kayak 6= combination of 1 & 2 7= combination of 1 & 3 -9= missing value
BOATNUM	Number of watercraft	As reported -9= missing response
BEGDATE	Start date	Actual date
ENDDATE	End date	Actual date
OLDVISIT	Number of past visits to this route	Actual except 5= five or more -9= missing response
SABRIV	Sabourin River area	0= never visited 1= have visited -9= missing response
GAMRIV	Gammon River area	0= never visited 1= have visited -9= missing response
OPTILAK	Optic Lake area	0= never visited 1= have visited -9= missing response
BLOODRIV	Bloodvien River area	0= never visited 1= have visited -9= missing response
SIMCREEK	Simeon Creek area	0= never visited 1= have visited -9= missing response
HAGGRIV	Haggart River area	0= never visited 1= have visited -9= missing response
OTHERWCC	Other Woodland park areas	0= never visited 1= have visited -9= missing response

QUETICO	Quetico Provincial Park	0= never visited 1= have visited -9= missing response
TURTLE	Turtle River Provincial Park	0= never visited 1= have visited -9= missing response
WABAKIMI	Wabakimi Provincial Park	0= never visited 1= have visited -9= missing response
BOUNDWAT	Boundary Waters Canoe Area	0= never visited 1= have visited -9= missing response
BRIGHT	Brightsands Provincial Park	0= never visited 1= have visited -9= missing response
NOPIMING	Nopiming Provincial Park	0= never visited 1= have visited -9= missing response
WHITESHEL	Whiteshell Provincial Park	0= never visited 1= have visited -9= missing response
ATIKAKI	Atikaki Provincial Park	0= never visited 1= have visited -9= missing response
OTHERPARK	Other park areas not listed above	0= no 1= yes -9= missing response
TRIPTYPE	What was the primary purpose for the visit to the park?	1. Canoe Trip 2. Fishing 3. Motor boat trip 4. Other (specify new list)
TRANSPORT	What means of transport was used to access the park?	1. Land 2. Water 3. Water (via Manitoba) 4. Air 5. Other

Table 6. Description of Variables and Codes for Attributes in the Campsite Database		
CODE	DESCIPTION	ENTER
Campsite#	Identification number for the campsite	Actual Entry
Route	Route travelled by survey team	Names
Section	Identification number for route section	Assigned by survey team
Location	Site is located on what type of area	1-Mainland 2-Peninsula 3-Island
Face	Direction the campsite Faces	1-N 2-NE 3-E 4-ES 5-S 6-SW 7-W 8-NW -9 missing
Side/Side	# of canoes to land side by side	Actual Entry -9 missing
Land	slope of shore at pull-out	1-5 flat to very steep -9 missing
Condition	Condition at pull-out	1-marshy 2-some vegetation 3-sand 4-rock 5-clear -9 missing
Pull	ease of pull-out	1-5 easy to very difficult -9 missing
Slope	Slope in the actual campsite Area	1-5 flat to very steep -9 missing
Gc-rock	ground cover - rock	enter % -9 missing

Gc-soil	ground cover - soil	enter % -9 missing
Gc-grass	ground cover - grass	enter % -9 missing
Gc-moss	ground cover - moss	enter % -9 missing
Gc-debris	ground cover - debris	enter % -9 missing
Gc-other	ground cover - other	enter % -9 missing
Specify	specify other	Actual Entry -9 missing
# Sites	# of tent sites on	Actual Entry -9 missing
Flat	# of tent sites on flat ground	Actual Entry -9 missing
Angle	# of tent sites on sloping ground	Actual Entry -9 missing
Firepit	Is there an existing fire pit	0-no 1-yes -9 missing
Wood	firewood availiabilty	1-little 2-some 3-abundant -9 missing
Compact	Amount of soil compaction	1-little 2-evident 3-obvious -9 missing
Weather	Exposure to Weather	1-sheltered 2-some shelter 3-exposed -9 missing

Table 7. Description of Variables and Codes for Attributes in the Portages Database

NAME	DESCRIPTION	NUMBER CODES
FORM#	Identification number	Unique coding number, indexed to route
ROUTE	Route travelled by survey team	Names
SECTION	Identification number for route section	Assigned by survey team
PORT-FROM	Point of origin	actual
PORT-TO	end of portage point	actual
LANDING	type of ground	1-clay 2-sand 3-muck 4-rock 5-grass -9 missing
SIDE/SIDE	Number of canoes can land side by side	actual -9 missing
LANDWIDTH	Width of landing area in meters	actual
LAUNCH	type of ground at end of portage	1-clay 2-sand 3-muck 4-rock 5-grass -9 missing
AREA	Width of launching area in meters	actual -9 missing
LENGTH	Length of portage trail	actual -9 missing
WIDTH	width of portage trail	actual -9 missing
WET	Percent of trail that is usually wet	actual -9 missing

DRY	Percent of trail that is usually dry	actual -9 missing
SLOPE	Slope of portage trail	1 to 5, flat to very steep
FALLS	Obstruction is a waterfall	0-no 1-yes -9 missing
RAPIDS	Obstruction is a rapids	0-no 1-yes -9 missing
ROCKDAM	Obstruction is a dam	0-no 1-yes -9 missing
LAKE	Obstruction is a lake to lake route	0-no 1-yes -9 missing
DROP	Approximate water drop in meters	actual -9 missing
SCENIC	Scenic value around portage	1-high 2-average 3-low -9 missing

Appendix A

User Reservation Information

Ident#	Person#	City	Prov	Country	Distcode	Park	Year
wc001	1263	Baltimore	MD	USA	MD21204	4	1991
wc002	1244	Cologne	MN	USA	MN55322	4	1991
wc003	1239	Minnitonka	MN	USA	MN55305	4	1991
wc004	1275	Albert Lea	MN	USA	MN56007	4	1991
wc005	1264	Clarks Grove	MN	USA	MN56016	4	1991
wc006	1254	Toronto	Ont	Canada	Ont6	4	1991
wc007	1208	Portage	MI	USA	MI49002	4	1991
wc008	1233	Winnipeg	Man	Canada	WpgR3K	4	1991
wc009	1273	Longbow Lake	Ont	Canada	Ont15	4	1991
wc010	1232	Bigfork	MN	USA	MN56628	4	1991
wc011	1257	International Falls	MN	USA	MN56649	4	1991
wc012	1257	Culver	IN	USA	IN46511	4	1991
wc013	1209	International Falls	MN	USA	MN56649	4	1991
wc014	1250	Ely	MN	USA	MN55731	4	1991
wc015	1198	Pinawa	Man	Canada	R0E 1L0	4	1991
wc016	1289	Cochenour	Ont	Canada	Ont9	4	1991
wc017	1287	Cochenour	Ont	Canada	Ont9	4	1991
wc018	1260	Red Lake	Ont	Canada	Ont14	4	1991
wc020	1299	Portage	WI	USA	WI53901	4	1991
wc021	1260	Red Lake	Ont	Canada	Ont14	4	1992
wc022	1260	Red Lake	Ont	Canada	Ont14	4	1992
wc023	1250	Ely	MN	USA	MN55731	4	1992
wc024	1196	Duluth	MN	USA	MN55810	4	1992
wc025	1241	Troy	NC	USA	NC27371	4	1992
wc026	1219	Winnebago	MN	USA	MN56098	4	1992
wc027	1244	Cologne	MN	USA	MN55322	4	1992
wc028	1265	Eureka Springs	AR	USA	AR72632	4	1992
wc029	1275	Albert Lea	MN	USA	MN56007	4	1992
wc030	1276	Des Moines	IA	USA	IA50322	4	1992
wc031	1291	St. Louis	MO	USA	MO63128	4	1992
wc032	859	Winnipeg	Man	Canada	WpgR2K	4	1992
wc033	1260	Red Lake	Ont	Canada	Ont14	4	1992
wc034	486	Winnipeg	Man	Canada	WpgR3L	4	1992
wc035	1193	Ellendale	MN	USA	MN56026	4	1992
wc036	1229	St. Paul	MN	USA	MN55127	4	1992
wc037	1256	Rochester	MN	USA	MN55901	4	1992
wc038	1294	Evanston	IL	USA	IL60201	4	1992
wc039	1235	Havelock	NC	USA	NC28532	4	1992
wc040	1226	Neshboro	WI	USA	WI54960	4	1992
wc041	1211	Waterloo	Ont	Canada	Ont7	4	1992
wc042	360	Winnipeg	Man	Canada	WpgR3T	4	1992
wc043	606	Winnipeg	Man	Canada	WpgR3J	4	1992
wc044	1270	Brunswick	ME	USA	ME04011	4	1992
wc045	1213	Whittier	NC	USA	NC28789	4	1992
wc046	1202	Philadelphia	PA	USA	PA19144	4	1992
wc047	1212	Winnipeg	Man	Canada	WpgR2J	4	1992
wc048	1238	Chicago	IL	USA	IL60618	4	1992
wc049	1295	Red Lake	Ont	Canada	Ont14	4	1992
wc050	1221	Cook	MN	USA	MN55723	4	1992

Ident#	Person#	City	Prov	Country	Distcode	Park	Year
wc051	1274	Grand Rapids	MN	USA	MN55744	4	1992
wc052	1261	Moundsview	MN	USA	MN55112	4	1992
wc053	309	Kenora	Ont	Canada	Ont3	4	1992
wc054	1228	Hayward	WI	USA	WI54843	4	1992
wc055	1206	Red Lake	Ont	Canada	Ont14	4	1992
wc056	1209	International Falls	MN	USA	MN56649	4	1992
wc057	1248	International Falls	MN	USA	MN56649	4	1992
wc058	1257	International Falls	MN	USA	MN56649	4	1992
wc059	1234	Dundas	MN	USA	MN55014	4	1992
wc060	1223	Winnipeg	Man	Canada	WpgR2Y	4	1992
wc061	1246	Minneapolis	MN	USA	MN55405	4	1992
wc062	1230	Red Lake	Ont	Canada	Ont14	4	1992
wc064	1245	Ames	IA	USA	IA50010	4	1992
wc065	1290	Duluth	MN	USA	MN55804	4	1992
wc067	1233	Winnipeg	Man	Canada	WpgR3K	4	1992
wc068	1253	Red Lake	Ont	Canada	Ont14	4	1992
wc069	1274	Grand Rapids	MN	USA	MN55744	4	1992
wc070	1292	Winnipeg	Man	Canada	WpgR2N	4	1992
wc071	1237	Winnipeg	Man	Canada	WpgR3L	4	1992
wc072	1215	Winnipeg	Man	Canada	WpgR3M	4	1992
wc073	1281	Minneapolis	MN	USA	MN55403	4	1992
wc074	1227	Bigfork	MN	USA	MN56628	4	1992
wc075	1262	St. Cloud	MN	USA	MN56304	4	1992
wc076	1242	St. Cloud	MN	USA	MN56304	4	1992
wc077	1255	Grand Rapids	MN	USA	MN55744	4	1992
wc078	1283	Staunton	IL	USA	IL62088	4	1992
wc079	1284	Minneapolis	MN	USA	MN55412	4	1992
wc080	1233	Winnipeg	Man	Canada	WpgR3K	4	1992
wc081	1198	Pinawa	Man	Canada	R0E 1L0	4	1992
wc082	1301	Lac du Bonnet	Man	Canada	R0E 1A0	4	1992
wc083	1233	Winnipeg	Man	Canada	WpgR3K	4	1992
wc111	1268	Plymouth	MN	USA	MN55447	4	1992
wc084	1250	Ely	MN	USA	MN55731	4	1993
wc085	1271	Red Lake	Ont	Canada	Ont14	4	1993
wc086	78	Winnipeg	Man	Canada	WpgR2J	4	1993
wc087	1300	Maquoketa	IA	USA	IA52031	4	1993
wc088	1289	Cochenour	Ont	Canada	Ont9	4	1993
wc089	1210	Hamilton	Ont	Canada	Ont1	4	1993
wc090	1293	Buyck	MN	USA	MN55771	4	1993
wc091	1266	Red Lake	Ont	Canada	Ont14	4	1993
wc092	1203	Red Lake	Ont	Canada	Ont14	4	1993
wc093	1297	Marine on St. Croix	MN	USA	MN55047	4	1993
wc094	1271	Red Lake	Ont	Canada	Ont14	4	1993
wc095	1299	Portage	WI	USA	WI53901	4	1993
wc096	1242	St. Cloud	MN	USA	MN56304	4	1993
wc097	1214	Eau Claire	WI	USA	WI54701	4	1993
wc098	952	St. Cloud	MN	USA	MN56304	4	1993
wc099	1238	Chicago	IL	USA	IL60618	4	1993
wc100	1204	Covington	LA	USA	LA70433	4	1993

Ident#	Person#	City	Prov	Country	Distcode	Park	Year
wc101	1225	Skokie	IL	USA	IL60077	4	1993
wc102	1218	St. Paul	MN	USA	MN55116	4	1993
wc103	1228	Hayward	WI	USA	WI54843	4	1993
wc104	1236	Coon Rapids	MN	USA	MN55448	4	1993
wc105	1288	Cass Lake	MN	USA	MN56633	4	1993
wc106	1286	St. Cloud	MN	USA	MN56304	4	1993
wc107	1296	Red Lake	Ont	Canada	Ont14	4	1993
wc108	1207	Bigfork	MN	USA	MN56628	4	1993
wc109	1216	Grand Blanc	MI	USA	MI48439	4	1993
wc110	1269	Mt Clemens	MI	USA	MI48038	4	1993
wc112	1204	Covington	LA	USA	LA70433	4	1993
wc113	1241	Troy	NC	USA	NC27371	4	1993
wc114	1240	Toronto	Ont	Canada	Ont6	4	1993
wc115	1277	Winnipeg	Man	Canada	WpgR2N	4	1993
wc116	1257	International Falls	MN	USA	MN56649	4	1993
wc117	1209	International Falls	MN	USA	MN56649	4	1993
wc118	1248	International Falls	MN	USA	MN56649	4	1993
wc119	1200	Phillips	WI	USA	WI54555	4	1993
wc120	1285	Wayne	IL	USA	IL60184	4	1993
wc121	1200	Phillips	WI	USA	WI54555	4	1993
wc122	1194	Burr Ridge	IL	USA	IL60521	4	1993
wc123	1289	Cochenour	Ont	Canada	Ont9	4	1993
wc124	1292	Winnipeg	Man	Canada	WpgR2N	4	1993
wc125	1259	Ely	MN	USA	MN55731	4	1993
wc126	1243	Stone Mtn	GA	USA	GA30083	4	1993
wc127	606	Winnipeg	Man	Canada	WpgR3P	4	1993
wc128	1199	Bancroft	Ont	Canada	Ont13	4	1993
wc129	859	Winnipeg	Man	Canada	WpgR2K	4	1993
wc130	1267	Madison	WI	USA	WI53704	4	1993
wc131	1252	Winnipeg	Man	Canada	WpgR3N	4	1993
wc132	1279	Winnipeg	Man	Canada	WpgR3M	4	1993
wc133	1280	Sandstone	MN	USA	MN55072	4	1993
wc134	1217	Moreno Valley	CA	USA	CA92555	4	1993
wc135	732	Gimli	Man	Canada	R0C 1B0	4	1993
wc136	1219	Winnebago	MN	USA	MN56098	4	1993
wc137	1282	Orillia	Ont	Canada	Ont16	4	1993
wc138	1275	Waterville	MN	USA	MN56096	4	1993
wc139	604	Winnipeg	Man	Canada	WpgR3C	4	1993
wc140	1205	Arlington Heights	IL	USA	IL60004	4	1993
wc141	1251	Solon Springs	WI	USA	WI54873	4	1993
wc142	1201	Arden Hills	MN	USA	MN55112	4	1993
wc143	1260	Red Lake	Ont	Canada	Ont14	4	1993
wc144	1278	Milwaakee	WI	USA	WI53211	4	1993
wc145	1258	Mashfield	WI	USA	WI54449	4	1993
wc146	1220	Cochenour	Ont	Canada	Ont9	4	1993
wc147	1272	Verrieres le Buisson		France	Europe	4	1993
wc148	1195	Elkhart	IA	USA	IA50073	4	1993
wc149	1212	Winnipeg	Man	Canada	WpgR2J	4	1993
wc150	1222	Waveland	IN	USA	IN47989	4	1993

Ident#	Person#	City	Prov	Country	Distcode	Park	Year
wc151	1231	Ottawa	Ont	Canada	Ont12	4	1993
wc152	1197	Duluth	MN	USA	MN55812	4	1993
wc153	1224	Eagan	MN	USA	MN55123	4	1993
wc154	1245	Ames	IA	USA	IA50010	4	1993
wc155	1275	Eden Prairie Valley	MN	USA	MN55329	4	1993
wc156	1279	Winnipeg	Man	Canada	WpgR3M	4	1993
wc157	1221	Cook	MN	USA	MN55723	4	1993
WC001	1331	Superior	WI	USA	WI54880	4	1994
WC002	1204	Covington	LA	USA	LA70433	4	1994
WC003	1204	Covington	LA	USA	LA70433	4	1994
WC004	1217	Moreno Valley	CA	USA	CA92555	4	1994
WC005	1332	Stillwater	MN	USA	MN55082	4	1994
WC006	1228	Hayward	WI	USA	WI54843	4	1994
WC007	1233	Winnipeg	Man	Canada	WpgR3K	4	1994
WC008	1233	Winnipeg	Man	Canada	WpgR3K	4	1994
WC009	1233	Winnipeg	Man	Canada	WpgR3K	4	1994
WC010	1235	Havelock	NC	USA	NC28532	4	1994
WC011	1333	South Lancaster	MA	USA	MA01561	4	1994
WC012	1334	Kenora	Ont	Canada	Ont3	4	1994
WC013	1251	Solon Springs	WI	USA	WI54873	4	1994
WC014	1335	Eau Claire	WI	USA	WI54701	4	1994
WC015	1336	Decator	IL	USA	IL62522	4	1994
WC016	1337	Apple Valley	MN	USA	MN55124	4	1994
WC017	1338	Waterloo	Ont	Canada	Ont7	4	1994
WC018	1339	Wrenshall	MN	USA	MN55797	4	1994
WC019	1340	Red Lake	Ont	Canada	Ont14	4	1994
WC020	1300	Maquoketa	IA	USA	IA52031	4	1994
WC021	1269	Clinton Twp	MI	USA	MI48038	4	1994
WC022	1266	Red Lake	Ont	Canada	Ont14	4	1994
WC023	1319	Red Lake	Ont	Canada	Ont14	4	1994
WC024	1212	Winnipeg	Man	Canada	WpgR2J	4	1994
WC025	1325	Brainerd	MN	USA	MN56401	4	1994
WC026	1302	Ely	MN	USA	MN55731	4	1994
WC027	1321	Balmertown	Ont	Canada	Ont8	4	1994
WC028	1326	Winnipeg	Man	Canada	WpgR3R	4	1994
WC029	1289	Cochenour	Ont	Canada	Ont9	4	1994
WC030	1318	Ottawa	Ont	Canada	Ont12	4	1994
WC031	1317	Red Lake	Ont	Canada	Ont14	4	1994
WC032	1305	Keewatin	Ont	Canada	Ont10	4	1994
WC033	1315	Pinawa	Man	Canada	R0E 1L0	4	1994
WC034	78	Winnipeg	Man	Canada	WpgR2J	4	1994
WC035	1304	West Union	IA	USA	IA52175	4	1994
WC036	1330	Arcadia	WI	USA	WI54612	4	1994
WC037	1270	Brunswick	ME	USA	ME04011	4	1994
WC038	1213	Whittier	NC	USA	NC28789	4	1994
WC039	1269	Clinton Twp	MI	USA	MI48038	4	1994
WC040	1259	Ely	MN	USA	MN55731	4	1994
WC041	1324	Wright City	MO	USA	MO63390	4	1994
WC042	1302	Dayton	OH	USA	OH45419	4	1994

Ident#	Person#	City	Prov	Country	Distcode	Park	Year
WC043	1314	St. Louis	MO	USA	MO63124	4	1994
WC044	1320	St. Paul	MN	USA	MN55127	4	1994
WC045	1274	Grand Rapids	MN	USA	MN55744	4	1994
WC046	1308	Northglenn	CO	USA	CO80233	4	1994
WC047	1322	Marcell	MN	USA	MN56657	4	1994
WC048	1303	Minneapolis	MN	USA	MN55444	4	1994
WC049	1312	Stevens Point	WI	USA	WI54481	4	1994
WC050	1329	Millbrook	Ont	Canada	Ont11	4	1994
WC051	1327	Bloomington	MN	USA	MN55431	4	1994
WC052	1297	Marine on St. Croix	MN	USA	MN55047	4	1994
WC053	1307	Virginia	MN	USA	MN55792	4	1994
WC054	1327	Bloomington	MN	USA	MN55431	4	1994
WC055	1306	Madison	WI	USA	WI53704	4	1994
WC056	1309	Stevens Point	WI	USA	WI54481	4	1994
WC057	1310	Wilmette	IL	USA	IL60091	4	1994
WC058	1313	Burnsville	MN	USA	MN55337	4	1994
WC059	1236	Coon Rapids	MN	USA	MN55448	4	1994
WC060	1311	Minneapolis	MN	USA	MN55410	4	1994
WC061	1323	Enid	OK	USA	OK73701	4	1994
WC062	1316	Bolinas	CA	USA	CA94902	4	1994
WC063	1328	Cody	WY	USA	WY82414	4	1994
WC064	1250	Ely	MN	USA	MN55731	4	1994
WC065	1204	Covington	LA	USA	LA70433	4	1994
WC066	1343	Winnipeg	Man	Canada	WpgR2K	4	1994
WC067	1344	McFarland	WI	USA	WI?	4	1994
WC068	1207	Big Fork	MN	USA	MN56628	4	1994
WC069	1214	Eau Claire	WI	USA	WI54701	4	1994
WC070	1211	Waterloo	Ont	Canada	Ont7	4	1994
WC071	1209	International Falls	MN	USA	MN56649	4	1994
WC072	1306	Madison	WI	USA	WI53704	4	1994
WC073	1351	Grand Marais	MN	USA	MN55604	4	1994
WC074	1213	Whittier	NC	USA	NC28789	4	1994
WC075	1332	Stillwater	MN	USA	MN55082	4	1994
WC076	1307	Virginia	MN	USA	MN55792	4	1994
WC077	1356	Eden Prairie	MN	USA	MN55346	4	1994
WC078	1307	Virginia	MN	USA	MN55792	4	1994
WC079	1307	Virginia	MN	USA	MN55792	4	1994
WC080	1307	Virginia	MN	USA	MN55792	4	1994
WC081	1346	Meaford	Ont	Canada	Ont17	4	1994
WC082	1341	Cook	MN	USA	MN55723	4	1994
WC083	185	Winnipeg	Man	Canada	WpgR3G	4	1994
WC084	1368	Clarkfield	MN	USA	MN56223	4	1994
WC085	1219	Winnebago	MN	USA	MN56098	4	1994
WC086	1347	St. Paul	MN	USA	MN55105	4	1994
WC087	1348	Santafe	NM	USA	NM87501	4	1994
WC088	1349	Ely	MN	USA	MN55731	4	1994
WC089	1350	Red Lake	Ont	Canada	Ont14	4	1994
WC090	1352	Red Lake	Ont	Canada	Ont14	4	1994
WC091	1307	Virginia	MN	USA	MN55792	4	1994

Ident#	Person#	City	Prov	Country	Distcode	Park	Year
WC092	1353	Barron	WI	USA	WI54812	4	1994
WC093	1345	Stillwater	MN	USA	MN55082	4	1994
WC094	1354	Madison	WI	USA	WI53704	4	1994
WC095	1314	St. Louis	MO	USA	MO63410	4	1994
WC096	1355	Ely	MN	USA	MN55731	4	1994
WC097	1241	Troy	NC	USA	NC27371	4	1994
WC098	1339	Wrenshall	MN	USA	MN55797	4	1994
WC099	1244	Cologne	MN	USA	MN55322	4	1994
WC100	1244	Cologne	MN	USA	MN55322	4	1994
WC101	1244	Cologne	MN	USA	MN55322	4	1994
WC102	1357	Bauma	-999	Swiss	Europe	4	1994
WC103	1333	Ashburnham	MA	USA	MA1430	4	1994
WC104	1248	International Falls	MN	USA	MN56649	4	1994
WC105	1342	Cedar Rapids	IA	USA	IA52400	4	1994
WC106	1250	Ely	MN	USA	MN55731	4	1994
WC107	1257	International Falls	MN	USA	MN56649	4	1994
WC108	1367	Etobicoke	Ont	Canada	Ont18	4	1994
WC109	1260	Red Lake	Ont	Canada	Ont14	4	1994
WC110	549	Minneapolis	MN	USA	MN55410	4	1994
WC111	1358	Kenora	Ont	Canada	Ont3	4	1994
WC112	962	Winnipeg	Man	Canada	WpgR2C	4	1994
WC113	606	Winnipeg	Man	Canada	WpgR3P	4	1994
WC114	1360	Verrieres-Le-Buisson	Fran	France	Europe	4	1994
WC115	1366	Winnipeg	Man	Canada	WpgR3M	4	1994
WC116	1359	Hastings	MN	USA	MN55033	4	1994
WC117	1361	London	Ont	Canada	Ont4	4	1994
WC118	1362	Ely	MN	USA	MN55731	4	1994
WC119	1274	Grand Rapids	MN	USA	MN55744	4	1994
WC120	1275	Waterville	MN	USA	MN56096	4	1994
WC121	1322	Marcell	MN	USA	MN56657	4	1994
WC122	1363	Webster	MN	USA	MN55088	4	1994
WC123	1364	Ohio	IL	USA	IL61349	4	1994
WC124	1365	Minneapolis	MN	USA	MN55440	4	1994

Ident#	Grpsize	Grptype	Boattype	Boatnum	Begdate	Enddate	Oldvisit	Sabriv
wc001	6	-9	-9	-9	09/15/91	09/21/91	-9	-9
wc002	1	-9	-9	-9	09/06/91	09/16/91	-9	-9
wc003	3	-9	-9	-9	09/09/91	09/14/91	-9	-9
wc004	2	-9	-9	-9	09/03/91	09/10/91	-9	-9
wc005	2	-9	-9	-9	09/03/91	09/07/91	-9	-9
wc006	2	-9	-9	-9	06/05/91	06/11/91	-9	-9
wc007	1	-9	-9	-9	06/13/91	06/11/91	-9	-9
wc008	1	-9	-9	-9	06/19/91	06/10/91	-9	-9
wc009	-9	-9	-9	-9	06/22/91	01/01/99	-9	-9
wc010	7	-9	-9	-9	06/24/91	06/10/91	-9	-9
wc011	10	-9	-9	-9	06/27/91	06/09/91	-9	-9
wc012	6	-9	-9	-9	06/27/91	06/10/91	-9	-9
wc013	11	-9	-9	-9	06/27/91	06/09/91	-9	-9
wc014	2	-9	-9	-9	05/10/91	05/28/91	-9	-9
wc015	4	-9	-9	-9	05/18/91	05/10/91	-9	-9
wc016	2	-9	-9	-9	05/18/91	05/19/91	-9	-9
wc017	2	-9	-9	-9	05/18/91	05/21/91	-9	-9
wc018	-9	-9	-9	-9	05/19/91	01/01/99	-9	-9
wc020	4	-9	-9	-9	05/24/91	06/02/91	-9	-9
wc021	-9	-9	-9	-9	09/20/92	01/01/99	-9	-9
wc022	-9	-9	-9	-9	09/12/92	01/01/99	-9	-9
wc023	2	-9	-9	-9	09/27/92	10/10/92	-9	-9
wc024	2	-9	-9	-9	09/20/92	09/25/92	-9	-9
wc025	1	-9	-9	-9	09/16/92	09/26/92	-9	-9
wc026	3	-9	-9	-9	09/14/92	09/14/92	-9	-9
wc027	1	-9	-9	-9	09/11/92	09/20/92	-9	-9
wc028	4	-9	-9	-9	09/10/92	09/17/92	-9	-9
wc029	1	-9	-9	-9	09/07/92	09/13/92	-9	-9
wc030	5	-9	-9	-9	09/07/92	09/11/92	-9	-9
wc031	4	-9	-9	-9	09/05/92	09/11/92	-9	-9
wc032	8	-9	-9	-9	09/29/92	09/07/92	-9	-9
wc033	-9	-9	-9	-9	08/30/92	01/01/99	-9	-9
wc034	2	-9	-9	-9	08/13/92	08/20/92	-9	-9
wc035	4	-9	-9	-9	08/18/92	08/23/92	-9	-9
wc036	2	-9	-9	-9	08/11/92	08/18/92	-9	-9
wc037	6	-9	-9	-9	08/11/92	08/20/92	-9	-9
wc038	2	-9	-9	-9	08/11/92	08/20/92	-9	-9
wc039	2	-9	-9	-9	08/10/92	08/20/92	-9	-9
wc040	20	-9	-9	-9	08/09/92	08/17/92	-9	-9
wc041	4	-9	-9	-9	08/08/92	08/15/92	-9	-9
wc042	2	-9	-9	-9	08/07/92	08/17/92	-9	-9
wc043	2	-9	-9	-9	08/06/92	08/10/92	-9	-9
wc044	4	-9	-9	-9	08/06/92	08/16/92	-9	-9
wc045	2	-9	-9	-9	08/05/92	08/14/92	-9	-9
wc046	3	-9	-9	-9	08/04/92	08/10/92	-9	-9
wc047	5	-9	-9	-9	08/03/92	08/09/92	-9	-9
wc048	4	-9	-9	-9	08/02/92	08/09/92	-9	-9
wc049	3	-9	-9	-9	08/02/92	08/08/92	-9	-9
wc050	2	-9	-9	-9	08/01/92	08/09/92	-9	-9

Ident#	Grpsize	Grptype	Boattype	Boatnum	Begdate	Enddate	Oldvisit	Sabriv
wc051	2	-9	-9	-9	07/26/92	07/27/92	-9	-9
wc052	2	-9	-9	-9	07/26/92	07/30/92	-9	-9
wc053	6	-9	-9	-9	07/23/92	07/27/92	-9	-9
wc054	2	-9	-9	-9	07/22/92	08/06/92	-9	-9
wc055	2	-9	-9	-9	07/18/92	07/19/92	-9	-9
wc056	12	-9	-9	-9	07/17/92	07/19/92	-9	-9
wc057	11	-9	-9	-9	07/17/92	07/19/92	-9	-9
wc058	6	-9	-9	-9	07/17/92	07/20/92	-9	-9
wc059	2	-9	-9	-9	07/16/92	07/29/92	-9	-9
wc060	9	-9	-9	-9	07/13/92	07/15/92	-9	-9
wc061	1	-9	-9	-9	07/11/92	07/25/92	-9	-9
wc062	3	-9	-9	-9	07/11/92	07/16/92	-9	-9
wc064	2	-9	-9	-9	07/20/92	07/26/92	-9	-9
wc065	2	-9	-9	-9	07/13/92	07/20/92	-9	-9
wc067	2	-9	-9	-9	07/04/92	07/12/92	-9	-9
wc068	1	-9	-9	-9	07/06/92	07/17/92	-9	-9
wc069	2	-9	-9	-9	06/02/92	06/04/92	-9	-9
wc070	4	-9	-9	-9	06/21/92	06/29/92	-9	-9
wc071	2	-9	-9	-9	06/22/92	06/28/92	-9	-9
wc072	2	-9	-9	-9	06/22/92	06/28/92	-9	-9
wc073	7	-9	-9	-9	06/22/92	07/01/92	-9	-9
wc074	3	-9	-9	-9	06/22/92	06/26/92	-9	-9
wc075	12	-9	-9	-9	06/28/92	07/01/92	-9	-9
wc076	12	-9	-9	-9	06/28/92	07/01/92	-9	-9
wc077	1	-9	-9	-9	06/26/92	06/29/92	-9	-9
wc078	2	-9	-9	-9	06/09/92	06/12/92	-9	-9
wc079	4	-9	-9	-9	05/06/92	05/15/92	-9	-9
wc080	2	-9	-9	-9	05/15/92	05/20/92	-9	-9
wc081	3	-9	-9	-9	05/21/92	05/27/92	-9	-9
wc082	-9	-9	-9	-9	05/25/92	01/01/99	-9	-9
wc083	2	-9	-9	-9	05/30/92	07/07/92	-9	-9
wc111	2	-9	-9	-9	07/08/93	07/14/93	-9	-9
wc084	2	-9	-9	-9	05/09/93	06/05/92	-9	-9
wc085	-9	-9	-9	-9	05/10/93	01/01/99	-9	-9
wc086	2	-9	-9	-9	05/15/93	05/20/93	-9	-9
wc087	4	-9	-9	-9	05/17/93	05/24/93	-9	-9
wc088	2	-9	-9	-9	05/21/93	05/24/93	-9	-9
wc089	2	-9	-9	-9	05/21/93	06/08/93	-9	-9
wc090	2	-9	-9	-9	05/22/93	05/30/93	-9	-9
wc091	4	-9	-9	-9	05/26/93	05/30/93	-9	-9
wc092	-9	-9	-9	-9	05/26/93	01/01/99	-9	-9
wc093	2	-9	-9	-9	05/28/93	06/02/93	-9	-9
wc094	-9	-9	-9	-9	05/29/93	01/01/99	-9	-9
wc095	4	-9	-9	-9	06/11/93	06/18/93	-9	-9
wc096	12	-9	-9	-9	06/25/93	06/26/93	-9	-9
wc097	6	-9	-9	-9	06/15/93	06/18/93	-9	-9
wc098	-9	-9	-9	-9	06/26/93	06/27/93	-9	-9
wc099	4	-9	-9	-9	06/27/93	07/03/93	-9	-9
wc100	18	-9	-9	-9	06/19/93	06/27/93	-9	-9

Ident#	Grpsize	Grptype	Boattype	Boatnum	Begdate	Enddate	Oldvisit	Sabriv
wc101	2	-9	-9	-9	06/01/93	01/01/99	-9	-9
wc102	2	-9	-9	-9	06/27/93	07/07/93	-9	-9
wc103	2	-9	-9	-9	06/17/93	06/30/93	-9	-9
wc104	-9	-9	-9	-9	06/15/93	01/01/99	-9	-9
wc105	12	-9	-9	-9	06/28/93	07/03/93	-9	-9
wc106	9	-9	-9	-9	06/26/93	06/27/93	-9	-9
wc107	1	-9	-9	-9	05/30/93	06/03/93	-9	-9
wc108	2	-9	-9	-9	06/19/93	06/20/93	-9	-9
wc109	2	-9	-9	-9	07/01/93	01/01/99	-9	-9
wc110	2	-9	-9	-9	07/03/93	07/19/93	-9	-9
wc112	19	-9	-9	-9	07/17/93	07/25/93	-9	-9
wc113	2	-9	-9	-9	07/16/93	07/27/93	-9	-9
wc114	2	-9	-9	-9	07/24/93	08/02/93	-9	-9
wc115	4	-9	-9	-9	07/02/93	07/05/93	-9	-9
wc116	8	-9	-9	-9	07/17/93	07/20/93	-9	-9
wc117	10	-9	-9	-9	07/17/93	07/20/93	-9	-9
wc118	10	-9	-9	-9	07/17/93	07/20/93	-9	-9
wc119	2	-9	-9	-9	07/30/93	08/07/93	-9	-9
wc120	-9	-9	-9	-9	07/20/93	01/01/99	-9	-9
wc121	3	-9	-9	-9	07/30/93	08/06/93	-9	-9
wc122	2	-9	-9	-9	07/30/93	08/07/93	-9	-9
wc123	2	-9	-9	-9	07/30/93	08/01/93	-9	-9
wc124	2	-9	-9	-9	06/27/93	07/03/93	-9	-9
wc125	2	-9	-9	-9	08/14/93	08/28/93	-9	-9
wc126	4	-9	-9	-9	08/03/93	08/13/93	-9	-9
wc127	2	-9	-9	-9	08/05/93	08/08/93	-9	-9
wc128	10	-9	-9	-9	08/08/93	08/10/93	-9	-9
wc129	8	-9	-9	-9	08/27/93	09/03/93	-9	-9
wc130	2	-9	-9	-9	08/03/93	08/11/93	-9	-9
wc131	4	-9	-9	-9	08/23/93	08/27/93	-9	-9
wc132	2	-9	-9	-9	08/10/93	08/13/93	-9	-9
wc133	1	-9	-9	-9	08/13/93	08/28/93	-9	-9
wc134	2	-9	-9	-9	08/08/93	08/12/93	-9	-9
wc135	2	-9	-9	-9	08/22/93	08/28/93	-9	-9
wc136	2	-9	-9	-9	09/06/93	09/09/93	-9	-9
wc137	2	-9	-9	-9	08/31/93	09/03/93	-9	-9
wc138	1	-9	-9	-9	09/06/93	09/12/93	-9	-9
wc139	4	-9	-9	-9	08/05/93	08/08/93	-9	-9
wc140	10	-9	-9	-9	08/10/93	08/17/93	-9	-9
wc141	6	-9	-9	-9	08/01/93	08/12/93	-9	-9
wc142	4	-9	-9	-9	09/05/93	09/11/93	-9	-9
wc143	-9	-9	-9	-9	04/10/93	01/01/99	-9	-9
wc144	6	-9	-9	-9	08/16/93	08/23/93	-9	-9
wc145	2	-9	-9	-9	08/27/93	09/03/93	-9	-9
wc146	2	-9	-9	-9	08/28/93	09/05/93	-9	-9
wc147	4	-9	-9	-9	08/28/93	09/04/93	-9	-9
wc148	2	-9	-9	-9	08/18/93	08/24/93	-9	-9
wc149	5	-9	-9	-9	08/01/93	08/06/93	-9	-9
wc150	4	-9	-9	-9	08/02/93	08/07/93	-9	-9

Ident#	Grpsize	Grptype	Boattype	Boatnum	Begdate	Enddate	Oldvisit	Sabriv
wc151	4	-9	-9	-9	08/10/93	08/23/93	-9	-9
wc152	2	-9	-9	-9	08/21/93	08/29/93	-9	-9
wc153	6	-9	-9	-9	08/29/93	09/01/93	-9	-9
wc154	2	-9	-9	-9	09/12/93	09/16/93	-9	-9
wc155	1	-9	-9	-9	09/09/93	09/14/93	-9	-9
wc156	4	-9	-9	-9	09/25/93	09/27/93	-9	-9
wc157	2	-9	-9	-9	08/07/93	08/14/93	-9	-9
WC001	2	1	1	1	07/09/94	07/19/94	0	-9
WC002	19	4	1	7	06/11/94	06/19/94	4	-9
WC003	16	4	1	6	07/09/94	07/17/94	4	-9
WC004	2	2	3	1	07/03/94	07/06/94	1	-9
WC005	10	3	1	5	08/06/94	08/12/94	2	-9
WC006	2	1	1	1	06/26/94	07/04/94	1	-9
WC007	2	2	1	1	06/06/94	06/15/94	5	-9
WC008	4	1	1	2	05/21/94	05/29/94	5	-9
WC009	2	2	1	1	07/09/94	07/18/94	5	-9
WC010	2	1	1	1	08/01/94	08/11/94	0	-9
WC011	2	1	1	1	07/25/94	08/05/94	0	-9
WC012	17	4	1	8	06/25/94	06/29/94	0	-9
WC013	6	2	1	3	06/16/94	01/01/99	1	-9
WC014	2	1	1	1	07/24/94	07/30/94	1	-9
WC015	2	1	1	1	06/27/94	07/09/94	0	-9
WC016	1	-9	1	1	06/15/94	10/31/94	0	-9
WC017	2	1	1	1	07/30/94	08/05/94	0	-9
WC018	6	2	1	3	07/30/94	08/06/94	9	-9
WC019	5	1	1	2	07/18/94	07/22/94	0	-9
WC020	4	2	1	2	07/02/94	07/09/94	3	-9
WC021	2	2	1	1	06/04/94	06/10/94	1	0
WC022	2	2	2	1	06/01/94	06/05/94	2	0
WC023	4	2	1	1	07/14/94	07/15/94	0	0
WC024	2	1	1	1	08/01/94	08/05/94	0	0
WC025	4	2	1	2	08/01/94	08/12/94	0	0
WC026	4	4	1	2	07/25/94	08/02/94	0	0
WC027	3	1	1	1	08/03/94	08/04/94	1	0
WC028	1	5	1	1	05/24/94	05/29/94	2	0
WC029	3	6	3	1	07/29/94	07/31/94	5	0
WC030	3	2	1	1	07/16/94	07/20/94	1	0
WC031	8	1	1	4	07/19/94	07/22/94	0	0
WC032	4	5	3	2	06/18/94	06/20/94	5	0
WC033	5	2	4	2	07/28/94	08/02/94	5	0
WC034	2	1	1	1	06/05/94	06/11/94	0	0
WC035	4	1	1	2	06/11/94	06/16/94	1	0
WC036	2	2	1	1	06/06/94	06/12/94	0	0
WC037	3	2	1	2	08/09/94	08/21/94	2	0
WC038	4	2	1	2	08/12/94	08/22/94	3	0
WC039	2	2	1	1	06/03/94	06/11/94	0	0
WC040	2	1	1	1	07/30/94	08/13/94	1	1
WC041	2	2	5	2	08/26/94	09/02/94	0	0
WC042	4	4	1	2	07/25/94	08/04/94	0	0

Ident#	Grpsize	Grptype	Boattype	Boatnum	Begdate	Enddate	Oldvisit	Sabriv
WC043	8	5	1	4	07/07/94	07/12/94	0	0
WC044	2	1	1	1	08/15/94	08/19/94	3	0
WC045	2	1	4	1	01/01/99	01/01/99	5	0
WC046	6	5	3	3	05/30/94	06/06/94	0	0
WC047	3	1	4	1	05/06/94	05/10/94	5	0
WC048	2	2	1	1	07/30/94	08/04/94	0	0
WC049	2	1	1	1	08/01/94	08/08/94	1	0
WC050	6	5	-9	3	08/07/94	08/14/94	0	0
WC051	3	5	1	-9	09/05/94	09/10/94	1	0
WC052	2	1	1	1	09/22/94	10/01/94	1	0
WC053	18	4	1	6	07/01/94	07/06/94	0	0
WC054	4	5	1	2	05/23/94	05/29/94	0	0
WC055	3	2	1	1	07/20/94	07/26/94	2	0
WC056	4	1	3	2	08/13/94	08/19/94	5	0
WC057	4	2	1	2	08/12/94	08/20/94	0	0
WC058	2	1	1	1	08/12/94	08/20/94	0	0
WC059	2	2	4	1	05/28/94	05/30/94	-9	0
WC060	4	2	1	2	06/26/94	07/04/94	1	0
WC061	1	2	1	1	05/30/94	06/08/94	0	0
WC062	2	2	1	2	06/28/94	07/10/94	1	1
WC063	4	6	3	2	06/06/94	06/13/94	0	0
WC064	2	1	1	1	05/14/94	05/21/94	3	1
WC065	4	-9	-9	-9	08/01/94	08/05/94	-9	-9
WC066	2	-9	-9	-9	06/16/94	01/01/99	-9	-9
WC067	1	-9	-9	-9	07/11/94	07/15/94	-9	-9
WC068	3	-9	-9	-9	06/04/94	06/07/94	-9	-9
WC069	4	-9	-9	-9	06/03/94	06/05/94	-9	-9
WC070	4	-9	-9	-9	08/22/94	08/29/94	-9	-9
WC071	10	-9	-9	-9	07/24/94	07/27/94	-9	-9
WC072	2	-9	-9	-9	07/11/94	07/17/94	-9	-9
WC073	4	-9	-9	-9	07/01/94	07/08/94	-9	-9
WC074	2	-9	-9	-9	08/24/94	08/27/94	-9	-9
WC075	2	-9	-9	-9	08/05/94	08/09/94	-9	-9
WC076	8	-9	-9	-9	08/08/94	08/11/94	-9	-9
WC077	1	-9	-9	-9	09/09/94	09/12/94	-9	-9
WC078	6	-9	-9	-9	07/18/94	07/22/94	-9	-9
WC079	6	-9	-9	-9	07/18/94	07/22/94	-9	-9
WC080	6	-9	-9	-9	07/18/94	07/22/94	-9	-9
WC081	6	-9	-9	-9	08/07/94	08/14/94	-9	-9
WC082	2	-9	-9	-9	09/02/94	09/08/94	-9	-9
WC083	4	-9	-9	-9	08/19/94	08/27/94	-9	-9
WC084	4	-9	-9	-9	09/08/94	09/12/94	-9	-9
WC085	2	-9	-9	-9	09/06/94	09/09/94	-9	-9
WC086	1	-9	-9	-9	09/01/94	09/07/94	-9	-9
WC087	1	-9	-9	-9	08/25/94	09/01/94	-9	-9
WC088	6	-9	-9	-9	06/25/94	06/28/94	-9	-9
WC089	-9	-9	-9	-9	07/29/94	07/29/94	-9	-9
WC090	4	-9	-9	-9	08/22/94	08/24/94	-9	-9
WC091	7	-9	-9	-9	08/08/94	08/11/94	-9	-9

Ident#	Grpsize	Grptype	Boattype	Boatnum	Begdate	Enddate	Oldvisit	Sabriv
WC092	8	-9	-9	-9	08/22/94	08/27/94	-9	-9
WC093	2	-9	-9	-9	06/15/94	06/19/94	-9	-9
WC094	2	-9	-9	-9	09/17/94	09/23/94	-9	-9
WC095	8	-9	-9	-9	06/08/94	06/13/94	-9	-9
WC096	2	-9	-9	-9	09/08/94	09/17/94	-9	-9
WC097	2	-9	-9	-9	08/12/94	08/24/94	-9	-9
WC098	5	-9	-9	-9	07/30/94	01/01/99	-9	-9
WC099	1	-9	-9	-9	09/09/94	09/15/94	-9	-9
WC100	3	-9	-9	-9	09/12/94	09/16/94	-9	-9
WC101	1	-9	-9	-9	08/09/94	01/01/99	-9	-9
WC102	6	-9	-9	-9	09/17/94	09/20/94	-9	-9
WC103	2	-9	-9	-9	08/07/94	01/01/99	-9	-9
WC104	10	-9	-9	-9	07/24/94	07/27/94	-9	-9
WC105	4	-9	-9	-9	06/01/94	06/05/94	-9	-9
WC106	2	-9	-9	-9	05/26/94	06/05/94	-9	-9
WC107	10	-9	-9	-9	07/24/94	07/27/94	-9	-9
WC108	2	-9	-9	-9	08/16/94	08/19/94	-9	-9
WC109	2	-9	-9	-9	08/26/94	08/27/94	-9	-9
WC110	13	-9	-9	-9	08/26/94	09/01/94	-9	-9
WC111	-9	-9	-9	-9	07/01/94	07/03/94	-9	-9
WC112	2	-9	-9	-9	07/21/94	07/31/94	-9	-9
WC113	2	-9	-9	-9	08/05/94	08/13/94	-9	-9
WC114	6	-9	-9	-9	08/25/94	09/01/94	-9	-9
WC115	2	-9	-9	-9	07/10/94	07/13/94	-9	-9
WC116	4	-9	-9	-9	05/06/94	05/10/94	-9	-9
WC117	8	-9	-9	-9	07/09/94	07/10/94	-9	-9
WC118	6	-9	-9	-9	07/26/94	08/02/94	-9	-9
WC119	2	-9	-9	-9	06/23/94	06/25/94	-9	-9
WC120	1	-9	-9	-9	09/06/94	01/01/99	-9	-9
WC121	2	-9	-9	-9	06/03/94	06/07/94	-9	-9
WC122	2	-9	-9	-9	07/28/94	08/01/94	-9	-9
WC123	3	-9	-9	-9	06/30/94	07/07/94	-9	-9
WC124	2	-9	-9	-9	08/16/94	08/24/94	-9	-9

Ident#	Gamriv	Optilak	Bloodriv	Simcreek	Haggriv	Otherwcc	Quetic	Turtle
wc001	-9	-9	-9	-9	-9	-9	-9	-9
wc002	-9	-9	-9	-9	-9	-9	-9	-9
wc003	-9	-9	-9	-9	-9	-9	-9	-9
wc004	-9	-9	-9	-9	-9	-9	-9	-9
wc005	-9	-9	-9	-9	-9	-9	-9	-9
wc006	-9	-9	-9	-9	-9	-9	-9	-9
wc007	-9	-9	-9	-9	-9	-9	-9	-9
wc008	-9	-9	-9	-9	-9	-9	-9	-9
wc009	-9	-9	-9	-9	-9	-9	-9	-9
wc010	-9	-9	-9	-9	-9	-9	-9	-9
wc011	-9	-9	-9	-9	-9	-9	-9	-9
wc012	-9	-9	-9	-9	-9	-9	-9	-9
wc013	-9	-9	-9	-9	-9	-9	-9	-9
wc014	-9	-9	-9	-9	-9	-9	-9	-9
wc015	-9	-9	-9	-9	-9	-9	-9	-9
wc016	-9	-9	-9	-9	-9	-9	-9	-9
wc017	-9	-9	-9	-9	-9	-9	-9	-9
wc018	-9	-9	-9	-9	-9	-9	-9	-9
wc020	-9	-9	-9	-9	-9	-9	-9	-9
wc021	-9	-9	-9	-9	-9	-9	-9	-9
wc022	-9	-9	-9	-9	-9	-9	-9	-9
wc023	-9	-9	-9	-9	-9	-9	-9	-9
wc024	-9	-9	-9	-9	-9	-9	-9	-9
wc025	-9	-9	-9	-9	-9	-9	-9	-9
wc026	-9	-9	-9	-9	-9	-9	-9	-9
wc027	-9	-9	-9	-9	-9	-9	-9	-9
wc028	-9	-9	-9	-9	-9	-9	-9	-9
wc029	-9	-9	-9	-9	-9	-9	-9	-9
wc030	-9	-9	-9	-9	-9	-9	-9	-9
wc031	-9	-9	-9	-9	-9	-9	-9	-9
wc032	-9	-9	-9	-9	-9	-9	-9	-9
wc033	-9	-9	-9	-9	-9	-9	-9	-9
wc034	-9	-9	-9	-9	-9	-9	-9	-9
wc035	-9	-9	-9	-9	-9	-9	-9	-9
wc036	-9	-9	-9	-9	-9	-9	-9	-9
wc037	-9	-9	-9	-9	-9	-9	-9	-9
wc038	-9	-9	-9	-9	-9	-9	-9	-9
wc039	-9	-9	-9	-9	-9	-9	-9	-9
wc040	-9	-9	-9	-9	-9	-9	-9	-9
wc041	-9	-9	-9	-9	-9	-9	-9	-9
wc042	-9	-9	-9	-9	-9	-9	-9	-9
wc043	-9	-9	-9	-9	-9	-9	-9	-9
wc044	-9	-9	-9	-9	-9	-9	-9	-9
wc045	-9	-9	-9	-9	-9	-9	-9	-9
wc046	-9	-9	-9	-9	-9	-9	-9	-9
wc047	-9	-9	-9	-9	-9	-9	-9	-9
wc048	-9	-9	-9	-9	-9	-9	-9	-9
wc049	-9	-9	-9	-9	-9	-9	-9	-9
wc050	-9	-9	-9	-9	-9	-9	-9	-9

Ident#	Gamriv	Optilak	Bloodriv	Simcreek	Haggriv	Otherwcc	Quetic	Turtle
wc051	-9	-9	-9	-9	-9	-9	-9	-9
wc052	-9	-9	-9	-9	-9	-9	-9	-9
wc053	-9	-9	-9	-9	-9	-9	-9	-9
wc054	-9	-9	-9	-9	-9	-9	-9	-9
wc055	-9	-9	-9	-9	-9	-9	-9	-9
wc056	-9	-9	-9	-9	-9	-9	-9	-9
wc057	-9	-9	-9	-9	-9	-9	-9	-9
wc058	-9	-9	-9	-9	-9	-9	-9	-9
wc059	-9	-9	-9	-9	-9	-9	-9	-9
wc060	-9	-9	-9	-9	-9	-9	-9	-9
wc061	-9	-9	-9	-9	-9	-9	-9	-9
wc062	-9	-9	-9	-9	-9	-9	-9	-9
wc064	-9	-9	-9	-9	-9	-9	-9	-9
wc065	-9	-9	-9	-9	-9	-9	-9	-9
wc067	-9	-9	-9	-9	-9	-9	-9	-9
wc068	-9	-9	-9	-9	-9	-9	-9	-9
wc069	-9	-9	-9	-9	-9	-9	-9	-9
wc070	-9	-9	-9	-9	-9	-9	-9	-9
wc071	-9	-9	-9	-9	-9	-9	-9	-9
wc072	-9	-9	-9	-9	-9	-9	-9	-9
wc073	-9	-9	-9	-9	-9	-9	-9	-9
wc074	-9	-9	-9	-9	-9	-9	-9	-9
wc075	-9	-9	-9	-9	-9	-9	-9	-9
wc076	-9	-9	-9	-9	-9	-9	-9	-9
wc077	-9	-9	-9	-9	-9	-9	-9	-9
wc078	-9	-9	-9	-9	-9	-9	-9	-9
wc079	-9	-9	-9	-9	-9	-9	-9	-9
wc080	-9	-9	-9	-9	-9	-9	-9	-9
wc081	-9	-9	-9	-9	-9	-9	-9	-9
wc082	-9	-9	-9	-9	-9	-9	-9	-9
wc083	-9	-9	-9	-9	-9	-9	-9	-9
wc111	-9	-9	-9	-9	-9	-9	-9	-9
wc084	-9	-9	-9	-9	-9	-9	-9	-9
wc085	-9	-9	-9	-9	-9	-9	-9	-9
wc086	-9	-9	-9	-9	-9	-9	-9	-9
wc087	-9	-9	-9	-9	-9	-9	-9	-9
wc088	-9	-9	-9	-9	-9	-9	-9	-9
wc089	-9	-9	-9	-9	-9	-9	-9	-9
wc090	-9	-9	-9	-9	-9	-9	-9	-9
wc091	-9	-9	-9	-9	-9	-9	-9	-9
wc092	-9	-9	-9	-9	-9	-9	-9	-9
wc093	-9	-9	-9	-9	-9	-9	-9	-9
wc094	-9	-9	-9	-9	-9	-9	-9	-9
wc095	-9	-9	-9	-9	-9	-9	-9	-9
wc096	-9	-9	-9	-9	-9	-9	-9	-9
wc097	-9	-9	-9	-9	-9	-9	-9	-9
wc098	-9	-9	-9	-9	-9	-9	-9	-9
wc099	-9	-9	-9	-9	-9	-9	-9	-9
wc100	-9	-9	-9	-9	-9	-9	-9	-9

Ident#	Gamriv	Optilak	Bloodriv	Simcreek	Haggriv	Otherwcc	Quetic	Turtle
wc101	-9	-9	-9	-9	-9	-9	-9	-9
wc102	-9	-9	-9	-9	-9	-9	-9	-9
wc103	-9	-9	-9	-9	-9	-9	-9	-9
wc104	-9	-9	-9	-9	-9	-9	-9	-9
wc105	-9	-9	-9	-9	-9	-9	-9	-9
wc106	-9	-9	-9	-9	-9	-9	-9	-9
wc107	-9	-9	-9	-9	-9	-9	-9	-9
wc108	-9	-9	-9	-9	-9	-9	-9	-9
wc109	-9	-9	-9	-9	-9	-9	-9	-9
wc110	-9	-9	-9	-9	-9	-9	-9	-9
wc112	-9	-9	-9	-9	-9	-9	-9	-9
wc113	-9	-9	-9	-9	-9	-9	-9	-9
wc114	-9	-9	-9	-9	-9	-9	-9	-9
wc115	-9	-9	-9	-9	-9	-9	-9	-9
wc116	-9	-9	-9	-9	-9	-9	-9	-9
wc117	-9	-9	-9	-9	-9	-9	-9	-9
wc118	-9	-9	-9	-9	-9	-9	-9	-9
wc119	-9	-9	-9	-9	-9	-9	-9	-9
wc120	-9	-9	-9	-9	-9	-9	-9	-9
wc121	-9	-9	-9	-9	-9	-9	-9	-9
wc122	-9	-9	-9	-9	-9	-9	-9	-9
wc123	-9	-9	-9	-9	-9	-9	-9	-9
wc124	-9	-9	-9	-9	-9	-9	-9	-9
wc125	-9	-9	-9	-9	-9	-9	-9	-9
wc126	-9	-9	-9	-9	-9	-9	-9	-9
wc127	-9	-9	-9	-9	-9	-9	-9	-9
wc128	-9	-9	-9	-9	-9	-9	-9	-9
wc129	-9	-9	-9	-9	-9	-9	-9	-9
wc130	-9	-9	-9	-9	-9	-9	-9	-9
wc131	-9	-9	-9	-9	-9	-9	-9	-9
wc132	-9	-9	-9	-9	-9	-9	-9	-9
wc133	-9	-9	-9	-9	-9	-9	-9	-9
wc134	-9	-9	-9	-9	-9	-9	-9	-9
wc135	-9	-9	-9	-9	-9	-9	-9	-9
wc136	-9	-9	-9	-9	-9	-9	-9	-9
wc137	-9	-9	-9	-9	-9	-9	-9	-9
wc138	-9	-9	-9	-9	-9	-9	-9	-9
wc139	-9	-9	-9	-9	-9	-9	-9	-9
wc140	-9	-9	-9	-9	-9	-9	-9	-9
wc141	-9	-9	-9	-9	-9	-9	-9	-9
wc142	-9	-9	-9	-9	-9	-9	-9	-9
wc143	-9	-9	-9	-9	-9	-9	-9	-9
wc144	-9	-9	-9	-9	-9	-9	-9	-9
wc145	-9	-9	-9	-9	-9	-9	-9	-9
wc146	-9	-9	-9	-9	-9	-9	-9	-9
wc147	-9	-9	-9	-9	-9	-9	-9	-9
wc148	-9	-9	-9	-9	-9	-9	-9	-9
wc149	-9	-9	-9	-9	-9	-9	-9	-9
wc150	-9	-9	-9	-9	-9	-9	-9	-9

Ident#	Gamriv	Optilak	Bloodriv	Simcreek	Haggriv	Otherwcc	Quetic	Turtle
wc151	-9	-9	-9	-9	-9	-9	-9	-9
wc152	-9	-9	-9	-9	-9	-9	-9	-9
wc153	-9	-9	-9	-9	-9	-9	-9	-9
wc154	-9	-9	-9	-9	-9	-9	-9	-9
wc155	-9	-9	-9	-9	-9	-9	-9	-9
wc156	-9	-9	-9	-9	-9	-9	-9	-9
wc157	-9	-9	-9	-9	-9	-9	-9	-9
WC001	-9	-9	-9	-9	-9	-9	-9	-9
WC002	-9	-9	-9	-9	-9	-9	-9	-9
WC003	-9	-9	-9	-9	-9	-9	-9	-9
WC004	-9	-9	-9	-9	-9	-9	-9	-9
WC005	-9	-9	-9	-9	-9	-9	-9	-9
WC006	-9	-9	-9	-9	-9	-9	-9	-9
WC007	-9	-9	-9	-9	-9	-9	-9	-9
WC008	-9	-9	-9	-9	-9	-9	-9	-9
WC009	-9	-9	-9	-9	-9	-9	-9	-9
WC010	-9	-9	-9	-9	-9	-9	-9	-9
WC011	-9	-9	-9	-9	-9	-9	-9	-9
WC012	-9	-9	-9	-9	-9	-9	-9	-9
WC013	-9	-9	-9	-9	-9	-9	-9	-9
WC014	-9	-9	-9	-9	-9	-9	-9	-9
WC015	-9	-9	-9	-9	-9	-9	-9	-9
WC016	-9	-9	-9	-9	1	-9	-9	-9
WC017	-9	-9	-9	-9	-9	-9	-9	-9
WC018	-9	-9	-9	-9	-9	-9	-9	-9
WC019	-9	-9	-9	-9	-9	-9	-9	-9
WC020	-9	-9	-9	-9	-9	-9	-9	-9
WC021	1	0	0	0	1	0	1	0
WC022	0	0	0	0	0	1	0	0
WC023	0	0	0	0	0	0	0	0
WC024	0	0	0	0	1	1	1	0
WC025	0	0	0	0	0	1	1	0
WC026	0	0	0	0	0	0	1	0
WC027	0	1	0	0	0	0	1	0
WC028	1	1	1	1	1	0	0	0
WC029	0	0	0	0	0	0	0	0
WC030	0	0	0	0	0	0	1	0
WC031	0	0	0	0	0	0	0	0
WC032	0	0	0	0	0	0	0	0
WC033	0	0	0	0	0	1	1	1
WC034	0	0	0	0	0	0	1	0
WC035	0	0	0	0	0	0	1	0
WC036	1	1	0	0	0	0	1	0
WC037	0	0	1	1	1	0	1	0
WC038	0	1	1	0	0	0	1	0
WC039	0	0	0	0	0	1	1	0
WC040	1	1	1	1	1	0	1	0
WC041	0	0	0	0	0	0	0	0
WC042	0	0	0	0	0	0	1	0

Ident#	Gamriv	Optilak	Bloodriv	Simcreek	Haggriv	Otherwcc	Quetic	Turtle
WC043	0	0	1	0	0	0	0	0
WC044	0	0	0	0	0	0	1	0
WC045	0	0	0	0	0	0	0	0
WC046	0	0	0	0	0	0	0	0
WC047	0	0	0	0	0	1	0	0
WC048	0	0	0	0	0	0	1	0
WC049	0	0	0	0	0	0	1	0
WC050	0	0	0	0	0	0	0	0
WC051	0	0	0	0	0	1	1	0
WC052	0	0	0	0	0	0	1	0
WC053	0	0	0	0	0	0	1	0
WC054	0	0	0	0	0	0	1	0
WC055	0	1	0	0	0	0	0	0
WC056	0	0	0	0	0	0	0	0
WC057	0	1	0	0	1	0	1	0
WC058	0	0	0	0	0	0	1	0
WC059	0	0	0	0	0	0	0	0
WC060	0	1	0	0	0	1	0	0
WC061	0	0	0	0	0	0	1	0
WC062	0	0	0	0	0	1	0	0
WC063	0	0	0	0	0	0	1	0
WC064	1	1	1	1	1	1	1	0
WC065	-9	-9	-9	-9	-9	-9	-9	-9
WC066	-9	-9	-9	-9	-9	-9	-9	-9
WC067	-9	-9	-9	-9	-9	-9	-9	-9
WC068	-9	-9	-9	-9	-9	-9	-9	-9
WC069	-9	-9	-9	-9	-9	-9	-9	-9
WC070	-9	-9	-9	-9	-9	-9	-9	-9
WC071	-9	-9	-9	-9	-9	-9	-9	-9
WC072	-9	-9	-9	-9	-9	-9	-9	-9
WC073	-9	-9	-9	-9	-9	-9	-9	-9
WC074	-9	-9	-9	-9	-9	-9	-9	-9
WC075	-9	-9	-9	-9	-9	-9	-9	-9
WC076	-9	-9	-9	-9	-9	-9	-9	-9
WC077	-9	-9	-9	-9	-9	-9	-9	-9
WC078	-9	-9	-9	-9	-9	-9	-9	-9
WC079	-9	-9	-9	-9	-9	-9	-9	-9
WC080	-9	-9	-9	-9	-9	-9	-9	-9
WC081	-9	-9	-9	-9	-9	-9	-9	-9
WC082	-9	-9	-9	-9	-9	-9	-9	-9
WC083	-9	-9	-9	-9	-9	-9	-9	-9
WC084	-9	-9	-9	-9	-9	-9	-9	-9
WC085	-9	-9	-9	-9	-9	-9	-9	-9
WC086	-9	-9	-9	-9	-9	-9	-9	-9
WC087	-9	-9	-9	-9	-9	-9	-9	-9
WC088	-9	-9	-9	-9	-9	-9	-9	-9
WC089	-9	-9	-9	-9	-9	-9	-9	-9
WC090	-9	-9	-9	-9	-9	-9	-9	-9
WC091	-9	-9	-9	-9	-9	-9	-9	-9

Ident#	Gamriv	Optilak	Bloodriv	Simcreek	Haggriv	Otherwcc	Quetic	Turtle
WC092	-9	-9	-9	-9	-9	-9	-9	-9
WC093	-9	-9	-9	-9	-9	-9	-9	-9
WC094	-9	-9	-9	-9	-9	-9	-9	-9
WC095	-9	-9	-9	-9	-9	-9	-9	-9
WC096	-9	-9	-9	-9	-9	-9	-9	-9
WC097	-9	-9	-9	-9	-9	-9	-9	-9
WC098	-9	-9	-9	-9	-9	-9	-9	-9
WC099	-9	-9	-9	-9	-9	-9	-9	-9
WC100	-9	-9	-9	-9	-9	-9	-9	-9
WC101	-9	-9	-9	-9	-9	-9	-9	-9
WC102	-9	-9	-9	-9	-9	-9	-9	-9
WC103	-9	-9	-9	-9	-9	-9	-9	-9
WC104	-9	-9	-9	-9	-9	-9	-9	-9
WC105	-9	-9	-9	-9	-9	-9	-9	-9
WC106	-9	-9	-9	-9	-9	-9	-9	-9
WC107	-9	-9	-9	-9	-9	-9	-9	-9
WC108	-9	-9	-9	-9	-9	-9	-9	-9
WC109	-9	-9	-9	-9	-9	-9	-9	-9
WC110	-9	-9	-9	-9	-9	-9	-9	-9
WC111	-9	-9	-9	-9	-9	-9	-9	-9
WC112	-9	-9	-9	-9	-9	-9	-9	-9
WC113	-9	-9	-9	-9	-9	-9	-9	-9
WC114	-9	-9	-9	-9	-9	-9	-9	-9
WC115	-9	-9	-9	-9	-9	-9	-9	-9
WC116	-9	-9	-9	-9	-9	-9	-9	-9
WC117	-9	-9	-9	-9	-9	-9	-9	-9
WC118	-9	-9	-9	-9	-9	-9	-9	-9
WC119	-9	-9	-9	-9	-9	-9	-9	-9
WC120	-9	-9	-9	-9	-9	-9	-9	-9
WC121	-9	-9	-9	-9	-9	-9	-9	-9
WC122	-9	-9	-9	-9	-9	-9	-9	-9
WC123	-9	-9	-9	-9	-9	-9	-9	-9
WC124	-9	-9	-9	-9	-9	-9	-9	-9

Ident#	Wabakimi	Boundwater	Bright	Nopiming	Whiteshell	Atikaki	Otherpark
wc001	-9	-9	-9	-9	-9	-9	-9
wc002	-9	-9	-9	-9	-9	-9	-9
wc003	-9	-9	-9	-9	-9	-9	-9
wc004	-9	-9	-9	-9	-9	-9	-9
wc005	-9	-9	-9	-9	-9	-9	-9
wc006	-9	-9	-9	-9	-9	-9	-9
wc007	-9	-9	-9	-9	-9	-9	-9
wc008	-9	-9	-9	-9	-9	-9	-9
wc009	-9	-9	-9	-9	-9	-9	-9
wc010	-9	-9	-9	-9	-9	-9	-9
wc011	-9	-9	-9	-9	-9	-9	-9
wc012	-9	-9	-9	-9	-9	-9	-9
wc013	-9	-9	-9	-9	-9	-9	-9
wc014	-9	-9	-9	-9	-9	-9	-9
wc015	-9	-9	-9	-9	-9	-9	-9
wc016	-9	-9	-9	-9	-9	-9	-9
wc017	-9	-9	-9	-9	-9	-9	-9
wc018	-9	-9	-9	-9	-9	-9	-9
wc020	-9	-9	-9	-9	-9	-9	-9
wc021	-9	-9	-9	-9	-9	-9	-9
wc022	-9	-9	-9	-9	-9	-9	-9
wc023	-9	-9	-9	-9	-9	-9	-9
wc024	-9	-9	-9	-9	-9	-9	-9
wc025	-9	-9	-9	-9	-9	-9	-9
wc026	-9	-9	-9	-9	-9	-9	-9
wc027	-9	-9	-9	-9	-9	-9	-9
wc028	-9	-9	-9	-9	-9	-9	-9
wc029	-9	-9	-9	-9	-9	-9	-9
wc030	-9	-9	-9	-9	-9	-9	-9
wc031	-9	-9	-9	-9	-9	-9	-9
wc032	-9	-9	-9	-9	-9	-9	-9
wc033	-9	-9	-9	-9	-9	-9	-9
wc034	-9	-9	-9	-9	-9	-9	-9
wc035	-9	-9	-9	-9	-9	-9	-9
wc036	-9	-9	-9	-9	-9	-9	-9
wc037	-9	-9	-9	-9	-9	-9	-9
wc038	-9	-9	-9	-9	-9	-9	-9
wc039	-9	-9	-9	-9	-9	-9	-9
wc040	-9	-9	-9	-9	-9	-9	-9
wc041	-9	-9	-9	-9	-9	-9	-9
wc042	-9	-9	-9	-9	-9	-9	-9
wc043	-9	-9	-9	-9	-9	-9	-9
wc044	-9	-9	-9	-9	-9	-9	-9
wc045	-9	-9	-9	-9	-9	-9	-9
wc046	-9	-9	-9	-9	-9	-9	-9
wc047	-9	-9	-9	-9	-9	-9	-9
wc048	-9	-9	-9	-9	-9	-9	-9
wc049	-9	-9	-9	-9	-9	-9	-9
wc050	-9	-9	-9	-9	-9	-9	-9

Ident#	Wabakimi	Boundwater	Bright	Nopiming	Whiteshell	Atikaki	Otherpark
wc051	-9	-9	-9	-9	-9	-9	-9
wc052	-9	-9	-9	-9	-9	-9	-9
wc053	-9	-9	-9	-9	-9	-9	-9
wc054	-9	-9	-9	-9	-9	-9	-9
wc055	-9	-9	-9	-9	-9	-9	-9
wc056	-9	-9	-9	-9	-9	-9	-9
wc057	-9	-9	-9	-9	-9	-9	-9
wc058	-9	-9	-9	-9	-9	-9	-9
wc059	-9	-9	-9	-9	-9	-9	-9
wc060	-9	-9	-9	-9	-9	-9	-9
wc061	-9	-9	-9	-9	-9	-9	-9
wc062	-9	-9	-9	-9	-9	-9	-9
wc064	-9	-9	-9	-9	-9	-9	-9
wc065	-9	-9	-9	-9	-9	-9	-9
wc067	-9	-9	-9	-9	-9	-9	-9
wc068	-9	-9	-9	-9	-9	-9	-9
wc069	-9	-9	-9	-9	-9	-9	-9
wc070	-9	-9	-9	-9	-9	-9	-9
wc071	-9	-9	-9	-9	-9	-9	-9
wc072	-9	-9	-9	-9	-9	-9	-9
wc073	-9	-9	-9	-9	-9	-9	-9
wc074	-9	-9	-9	-9	-9	-9	-9
wc075	-9	-9	-9	-9	-9	-9	-9
wc076	-9	-9	-9	-9	-9	-9	-9
wc077	-9	-9	-9	-9	-9	-9	-9
wc078	-9	-9	-9	-9	-9	-9	-9
wc079	-9	-9	-9	-9	-9	-9	-9
wc080	-9	-9	-9	-9	-9	-9	-9
wc081	-9	-9	-9	-9	-9	-9	-9
wc082	-9	-9	-9	-9	-9	-9	-9
wc083	-9	-9	-9	-9	-9	-9	-9
wc111	-9	-9	-9	-9	-9	-9	-9
wc084	-9	-9	-9	-9	-9	-9	-9
wc085	-9	-9	-9	-9	-9	-9	-9
wc086	-9	-9	-9	-9	-9	-9	-9
wc087	-9	-9	-9	-9	-9	-9	-9
wc088	-9	-9	-9	-9	-9	-9	-9
wc089	-9	-9	-9	-9	-9	-9	-9
wc090	-9	-9	-9	-9	-9	-9	-9
wc091	-9	-9	-9	-9	-9	-9	-9
wc092	-9	-9	-9	-9	-9	-9	-9
wc093	-9	-9	-9	-9	-9	-9	-9
wc094	-9	-9	-9	-9	-9	-9	-9
wc095	-9	-9	-9	-9	-9	-9	-9
wc096	-9	-9	-9	-9	-9	-9	-9
wc097	-9	-9	-9	-9	-9	-9	-9
wc098	-9	-9	-9	-9	-9	-9	-9
wc099	-9	-9	-9	-9	-9	-9	-9
wc100	-9	-9	-9	-9	-9	-9	-9

Ident#	Wabakimi	Boundwater	Bright	Nopiming	Whiteshell	Atikaki	Otherpark
wc101	-9	-9	-9	-9	-9	-9	-9
wc102	-9	-9	-9	-9	-9	-9	-9
wc103	-9	-9	-9	-9	-9	-9	-9
wc104	-9	-9	-9	-9	-9	-9	-9
wc105	-9	-9	-9	-9	-9	-9	-9
wc106	-9	-9	-9	-9	-9	-9	-9
wc107	-9	-9	-9	-9	-9	-9	-9
wc108	-9	-9	-9	-9	-9	-9	-9
wc109	-9	-9	-9	-9	-9	-9	-9
wc110	-9	-9	-9	-9	-9	-9	-9
wc112	-9	-9	-9	-9	-9	-9	-9
wc113	-9	-9	-9	-9	-9	-9	-9
wc114	-9	-9	-9	-9	-9	-9	-9
wc115	-9	-9	-9	-9	-9	-9	-9
wc116	-9	-9	-9	-9	-9	-9	-9
wc117	-9	-9	-9	-9	-9	-9	-9
wc118	-9	-9	-9	-9	-9	-9	-9
wc119	-9	-9	-9	-9	-9	-9	-9
wc120	-9	-9	-9	-9	-9	-9	-9
wc121	-9	-9	-9	-9	-9	-9	-9
wc122	-9	-9	-9	-9	-9	-9	-9
wc123	-9	-9	-9	-9	-9	-9	-9
wc124	-9	-9	-9	-9	-9	-9	-9
wc125	-9	-9	-9	-9	-9	-9	-9
wc126	-9	-9	-9	-9	-9	-9	-9
wc127	-9	-9	-9	-9	-9	-9	-9
wc128	-9	-9	-9	-9	-9	-9	-9
wc129	-9	-9	-9	-9	-9	-9	-9
wc130	-9	-9	-9	-9	-9	-9	-9
wc131	-9	-9	-9	-9	-9	-9	-9
wc132	-9	-9	-9	-9	-9	-9	-9
wc133	-9	-9	-9	-9	-9	-9	-9
wc134	-9	-9	-9	-9	-9	-9	-9
wc135	-9	-9	-9	-9	-9	-9	-9
wc136	-9	-9	-9	-9	-9	-9	-9
wc137	-9	-9	-9	-9	-9	-9	-9
wc138	-9	-9	-9	-9	-9	-9	-9
wc139	-9	-9	-9	-9	-9	-9	-9
wc140	-9	-9	-9	-9	-9	-9	-9
wc141	-9	-9	-9	-9	-9	-9	-9
wc142	-9	-9	-9	-9	-9	-9	-9
wc143	-9	-9	-9	-9	-9	-9	-9
wc144	-9	-9	-9	-9	-9	-9	-9
wc145	-9	-9	-9	-9	-9	-9	-9
wc146	-9	-9	-9	-9	-9	-9	-9
wc147	-9	-9	-9	-9	-9	-9	-9
wc148	-9	-9	-9	-9	-9	-9	-9
wc149	-9	-9	-9	-9	-9	-9	-9
wc150	-9	-9	-9	-9	-9	-9	-9

Ident#	Wabakimi	Boundwater	Bright	Nopiming	Whiteshell	Atikaki	Otherpark
wc151	-9	-9	-9	-9	-9	-9	-9
wc152	-9	-9	-9	-9	-9	-9	-9
wc153	-9	-9	-9	-9	-9	-9	-9
wc154	-9	-9	-9	-9	-9	-9	-9
wc155	-9	-9	-9	-9	-9	-9	-9
wc156	-9	-9	-9	-9	-9	-9	-9
wc157	-9	-9	-9	-9	-9	-9	-9
WC001	-9	-9	-9	-9	-9	-9	-9
WC002	-9	-9	-9	-9	-9	-9	-9
WC003	-9	-9	-9	-9	-9	-9	-9
WC004	-9	-9	-9	-9	-9	-9	-9
WC005	-9	-9	-9	-9	-9	-9	-9
WC006	-9	-9	-9	-9	-9	-9	-9
WC007	-9	-9	-9	-9	-9	-9	-9
WC008	-9	-9	-9	-9	-9	-9	-9
WC009	-9	-9	-9	-9	-9	-9	-9
WC010	-9	-9	-9	-9	-9	-9	-9
WC011	-9	-9	-9	-9	-9	-9	-9
WC012	-9	-9	-9	-9	-9	-9	-9
WC013	-9	-9	-9	-9	-9	-9	-9
WC014	-9	-9	-9	-9	-9	-9	-9
WC015	-9	-9	-9	-9	-9	-9	-9
WC016	-9	-9	-9	-9	-9	-9	-9
WC017	-9	-9	-9	-9	-9	-9	-9
WC018	-9	-9	-9	-9	-9	-9	-9
WC019	-9	-9	-9	-9	-9	-9	-9
WC020	-9	-9	-9	-9	-9	-9	-9
WC021	1	1	0	0	0	0	1
WC022	0	0	0	0	0	0	0
WC023	0	0	0	0	0	0	0
WC024	0	1	0	0	1	0	0
WC025	0	1	0	0	0	0	0
WC026	0	1	0	0	0	0	0
WC027	0	0	0	0	0	0	0
WC028	1	0	0	1	1	1	0
WC029	0	0	0	0	0	0	0
WC030	0	0	0	0	1	0	1
WC031	0	0	0	0	0	0	0
WC032	0	0	0	0	0	0	0
WC033	0	1	0	1	1	1	0
WC034	0	0	0	1	1	0	0
WC035	0	1	0	0	0	0	0
WC036	0	1	0	0	0	0	0
WC037	1	1	0	0	0	0	1
WC038	1	1	0	0	0	1	0
WC039	0	1	0	0	0	0	1
WC040	0	1	0	0	0	0	0
WC041	0	0	0	0	0	0	0
WC042	0	1	0	0	0	0	0

Ident#	Wabakimi	Boundwater	Bright	Nopiming	Whiteshell	Atikaki	Otherpark
WC043	0	0	0	0	0	0	0
WC044	0	0	0	0	0	0	0
WC045	0	0	0	0	0	0	0
WC046	0	1	0	0	0	0	0
WC047	0	0	0	0	0	0	0
WC048	0	1	0	0	0	0	0
WC049	0	0	0	0	0	0	0
WC050	0	0	0	0	0	0	1
WC051	0	1	0	0	0	0	0
WC052	0	1	0	0	0	0	0
WC053	0	0	0	0	0	0	0
WC054	0	1	0	0	0	0	0
WC055	0	0	0	0	0	0	0
WC056	0	0	0	0	0	0	0
WC057	1	1	0	0	0	0	0
WC058	1	1	0	0	0	0	0
WC059	0	0	0	0	0	0	0
WC060	0	1	0	0	0	1	1
WC061	0	0	0	0	0	0	0
WC062	0	0	0	0	0	1	0
WC063	0	0	0	0	0	0	0
WC064	0	1	0	0	0	1	0
WC065	-9	-9	-9	-9	-9	-9	-9
WC066	-9	-9	-9	-9	-9	-9	-9
WC067	-9	-9	-9	-9	-9	-9	-9
WC068	-9	-9	-9	-9	-9	-9	-9
WC069	-9	-9	-9	-9	-9	-9	-9
WC070	-9	-9	-9	-9	-9	-9	-9
WC071	-9	-9	-9	-9	-9	-9	-9
WC072	-9	-9	-9	-9	-9	-9	-9
WC073	-9	-9	-9	-9	-9	-9	-9
WC074	-9	-9	-9	-9	-9	-9	-9
WC075	-9	-9	-9	-9	-9	-9	-9
WC076	-9	-9	-9	-9	-9	-9	-9
WC077	-9	-9	-9	-9	-9	-9	-9
WC078	-9	-9	-9	-9	-9	-9	-9
WC079	-9	-9	-9	-9	-9	-9	-9
WC080	-9	-9	-9	-9	-9	-9	-9
WC081	-9	-9	-9	-9	-9	-9	-9
WC082	-9	-9	-9	-9	-9	-9	-9
WC083	-9	-9	-9	-9	-9	-9	-9
WC084	-9	-9	-9	-9	-9	-9	-9
WC085	-9	-9	-9	-9	-9	-9	-9
WC086	-9	-9	-9	-9	-9	-9	-9
WC087	-9	-9	-9	-9	-9	-9	-9
WC088	-9	-9	-9	-9	-9	-9	-9
WC089	-9	-9	-9	-9	-9	-9	-9
WC090	-9	-9	-9	-9	-9	-9	-9
WC091	-9	-9	-9	-9	-9	-9	-9

Ident#	Wabakimi	Boundwater	Bright	Nopiming	Whiteshell	Atikaki	Otherpark
WC092	-9	-9	-9	-9	-9	-9	-9
WC093	-9	-9	-9	-9	-9	-9	-9
WC094	-9	-9	-9	-9	-9	-9	-9
WC095	-9	-9	-9	-9	-9	-9	-9
WC096	-9	-9	-9	-9	-9	-9	-9
WC097	-9	-9	-9	-9	-9	-9	-9
WC098	-9	-9	-9	-9	-9	-9	-9
WC099	-9	-9	-9	-9	-9	-9	-9
WC100	-9	-9	-9	-9	-9	-9	-9
WC101	-9	-9	-9	-9	-9	-9	-9
WC102	-9	-9	-9	-9	-9	-9	-9
WC103	-9	-9	-9	-9	-9	-9	-9
WC104	-9	-9	-9	-9	-9	-9	-9
WC105	-9	-9	-9	-9	-9	-9	-9
WC106	-9	-9	-9	-9	-9	-9	-9
WC107	-9	-9	-9	-9	-9	-9	-9
WC108	-9	-9	-9	-9	-9	-9	-9
WC109	-9	-9	-9	-9	-9	-9	-9
WC110	-9	-9	-9	-9	-9	-9	-9
WC111	-9	-9	-9	-9	-9	-9	-9
WC112	-9	-9	-9	-9	-9	-9	-9
WC113	-9	-9	-9	-9	-9	-9	-9
WC114	-9	-9	-9	-9	-9	-9	-9
WC115	-9	-9	-9	-9	-9	-9	-9
WC116	-9	-9	-9	-9	-9	-9	-9
WC117	-9	-9	-9	-9	-9	-9	-9
WC118	-9	-9	-9	-9	-9	-9	-9
WC119	-9	-9	-9	-9	-9	-9	-9
WC120	-9	-9	-9	-9	-9	-9	-9
WC121	-9	-9	-9	-9	-9	-9	-9
WC122	-9	-9	-9	-9	-9	-9	-9
WC123	-9	-9	-9	-9	-9	-9	-9
WC124	-9	-9	-9	-9	-9	-9	-9

Ident#	Triptype	Transport
wc001	-9	-9
wc002	-9	-9
wc003	-9	-9
wc004	-9	-9
wc005	-9	-9
wc006	-9	-9
wc007	-9	-9
wc008	-9	-9
wc009	-9	-9
wc010	-9	-9
wc011	-9	-9
wc012	-9	-9
wc013	-9	-9
wc014	-9	-9
wc015	-9	-9
wc016	-9	-9
wc017	-9	-9
wc018	-9	-9
wc020	-9	-9
wc021	-9	-9
wc022	-9	-9
wc023	-9	-9
wc024	-9	-9
wc025	-9	-9
wc026	-9	-9
wc027	-9	-9
wc028	-9	-9
wc029	-9	-9
wc030	-9	-9
wc031	-9	-9
wc032	-9	-9
wc033	-9	-9
wc034	-9	-9
wc035	-9	-9
wc036	-9	-9
wc037	-9	-9
wc038	-9	-9
wc039	-9	-9
wc040	-9	-9
wc041	-9	-9
wc042	-9	-9
wc043	-9	-9
wc044	-9	-9
wc045	-9	-9
wc046	-9	-9
wc047	-9	-9
wc048	-9	-9
wc049	-9	-9
wc050	-9	-9

Ident#	Triptype	Transport
wc051	-9	-9
wc052	-9	-9
wc053	-9	-9
wc054	-9	-9
wc055	-9	-9
wc056	-9	-9
wc057	-9	-9
wc058	-9	-9
wc059	-9	-9
wc060	-9	-9
wc061	-9	-9
wc062	-9	-9
wc064	-9	-9
wc065	-9	-9
wc067	-9	-9
wc068	-9	-9
wc069	-9	-9
wc070	-9	-9
wc071	-9	-9
wc072	-9	-9
wc073	-9	-9
wc074	-9	-9
wc075	-9	-9
wc076	-9	-9
wc077	-9	-9
wc078	-9	-9
wc079	-9	-9
wc080	-9	-9
wc081	-9	-9
wc082	-9	-9
wc083	-9	-9
wc111	-9	-9
wc084	-9	-9
wc085	-9	-9
wc086	-9	-9
wc087	-9	-9
wc088	-9	-9
wc089	-9	-9
wc090	-9	-9
wc091	-9	-9
wc092	-9	-9
wc093	-9	-9
wc094	-9	-9
wc095	-9	-9
wc096	-9	-9
wc097	-9	-9
wc098	-9	-9
wc099	-9	-9
wc100	-9	-9

Ident#	Triptype	Transport
wc101	-9	-9
wc102	-9	-9
wc103	-9	-9
wc104	-9	-9
wc105	-9	-9
wc106	-9	-9
wc107	-9	-9
wc108	-9	-9
wc109	-9	-9
wc110	-9	-9
wc112	-9	-9
wc113	-9	-9
wc114	-9	-9
wc115	-9	-9
wc116	-9	-9
wc117	-9	-9
wc118	-9	-9
wc119	-9	-9
wc120	-9	-9
wc121	-9	-9
wc122	-9	-9
wc123	-9	-9
wc124	-9	-9
wc125	-9	-9
wc126	-9	-9
wc127	-9	-9
wc128	-9	-9
wc129	-9	-9
wc130	-9	-9
wc131	-9	-9
wc132	-9	-9
wc133	-9	-9
wc134	-9	-9
wc135	-9	-9
wc136	-9	-9
wc137	-9	-9
wc138	-9	-9
wc139	-9	-9
wc140	-9	-9
wc141	-9	-9
wc142	-9	-9
wc143	-9	-9
wc144	-9	-9
wc145	-9	-9
wc146	-9	-9
wc147	-9	-9
wc148	-9	-9
wc149	-9	-9
wc150	-9	-9

Ident#	Triptype	Transport
wc151	-9	-9
wc152	-9	-9
wc153	-9	-9
wc154	-9	-9
wc155	-9	-9
wc156	-9	-9
wc157	-9	-9
WC001	-9	-9
WC002	-9	-9
WC003	-9	-9
WC004	-9	-9
WC005	-9	-9
WC006	-9	-9
WC007	-9	-9
WC008	-9	-9
WC009	-9	-9
WC010	-9	-9
WC011	-9	-9
WC012	-9	-9
WC013	-9	-9
WC014	-9	-9
WC015	-9	-9
WC016	-9	-9
WC017	-9	-9
WC018	-9	-9
WC019	-9	-9
WC020	-9	-9
WC021	1	1
WC022	-9	4
WC023	1	1
WC024	1	4
WC025	1	1
WC026	1	1
WC027	1	1
WC028	1	1
WC029	7	4
WC030	10	1
WC031	10	1
WC032	14	4
WC033	7	4
WC034	1	1
WC035	1	1
WC036	1	2
WC037	1	5
WC038	10	1
WC039	1	1
WC040	1	1
WC041	2	4
WC042	1	1

Ident#	Triptype	Transport
WC043	8	4
WC044	5	1
WC045	2	4
WC046	2	4
WC047	7	4
WC048	1	1
WC049	1	1
WC050	1	1
WC051	1	1
WC052	1	1
WC053	1	1
WC054	1	1
WC055	8	4
WC056	2	4
WC057	1	4
WC058	1	4
WC059	7	4
WC060	1	1
WC061	11	1
WC062	1	2
WC063	2	4
WC064	1	2
WC065	-9	-9
WC066	-9	-9
WC067	-9	-9
WC068	-9	-9
WC069	-9	-9
WC070	-9	-9
WC071	-9	-9
WC072	-9	-9
WC073	-9	-9
WC074	-9	-9
WC075	-9	-9
WC076	-9	-9
WC077	-9	-9
WC078	-9	-9
WC079	-9	-9
WC080	-9	-9
WC081	-9	-9
WC082	-9	-9
WC083	-9	-9
WC084	-9	-9
WC085	-9	-9
WC086	-9	-9
WC087	-9	-9
WC088	-9	-9
WC089	-9	-9
WC090	-9	-9
WC091	-9	-9

Ident#	Triptype	Transport
WC092	-9	-9
WC093	-9	-9
WC094	-9	-9
WC095	-9	-9
WC096	-9	-9
WC097	-9	-9
WC098	-9	-9
WC099	-9	-9
WC100	-9	-9
WC101	-9	-9
WC102	-9	-9
WC103	-9	-9
WC104	-9	-9
WC105	-9	-9
WC106	-9	-9
WC107	-9	-9
WC108	-9	-9
WC109	-9	-9
WC110	-9	-9
WC111	-9	-9
WC112	-9	-9
WC113	-9	-9
WC114	-9	-9
WC115	-9	-9
WC116	-9	-9
WC117	-9	-9
WC118	-9	-9
WC119	-9	-9
WC120	-9	-9
WC121	-9	-9
WC122	-9	-9
WC123	-9	-9
WC124	-9	-9

Appendix B

Campsite Attribute Data

Site#	Form#	Route	Section	Location	Face	Side/side	Land	Condition
c1	01	Paull-Adventure	1	3	3	3	1	4
c3	02	Paull-Adventure	1	1	6	5	1	4
c2	03	Paull-Adventure	1	2	8	2	1	4
c4	04	Paull-Adventure	1	1	1	3	2	4
c5	05	Paull-Adventure	1	1	5	2	2	4
c6	06	Paull-Adventure	1	2	-9	10	1	4
c7	07	Paull-Adventure	1	1	-9	3	1	4
c8	08	Paull-Adventure	1	1	-9	2	2	4
c9	09	Paull-Adventure	1	3	-9	3	2	4
c10	10	Paull-Adventure	1	1	2	3	1	4
c11	11	Paull-Adventure	1	1	3	2	1	5
1	12	Chukuni-Olive	2	1	1	4	1	4
2	13	Chukuni-Olive	2	1	7	-9	2	-9
1	14	Chukuni-Olive	2	1	3	-9	-9	-9
4	15	Chukuni-Olive	2	1	5	2	3	4
3	16	Chukuni-Olive	2	1	5	2	2	4
7	17	Chukuni-Olive	2	1	4	3	4	4
6	18	Chukuni-Olive	2	3	5	2	3	4
5	19	Chukuni-Olive	2	1	3	2	3	4
8	20	Chukuni-Olive	2	2	-9	4	2	4
9	21	Chukuni-Olive	2	2	-9	4	2	4
a	22	Murdock-Royd	3	2	1	3	1	4
b	23	Murdock-Royd	3	1	4	3	2	4
c	24	Murdock-Royd	3	1	3	3	2	4
d	25	Murdock-Royd	3	-9	-9	1	4	1
e	26	Murdock-Royd	3	3	1	2	2	4
f	27	Murdock-Royd	3	1	5	3	2	4
a	28	Olive-Knox	4	2	3	1	3	4
b	29	Olive-Knox	4	2	3	4	1	4
c	30	Olive-Knox	4	3	2	2	3	4
d	31	Olive-Knox	4	2	8	2	2	4
f	32	Olive-Knox	4	1	5	5	2	4
e	33	Olive-Knox	4	2	5	2	3	4
g	34	Olive-Knox	4	3	3	3	3	4
h	35	Olive-Knox	4	3	4	3	2	4
a	36	Royd-Simeon	5	2	-9	2	2	4
c	37	Royd-Simeon	5	1	6	3	2	4
b	38	Royd-Simeon	5	1	8	4	2	4
e	39	Royd-Simeon	5	3	-9	3	2	4
d	40	Royd-Simeon	5	2	4	2	2	4
e	41	Royd-Simeon	5	3	-9	4	2	4
f	42	Royd-Simeon	5	3	4	2	2	4
h	43	Simeon-Carroll	6	2	6	3	1	4
g	44	Simeon-Carroll	6	1	1	2	1	1
f	45	Simeon-Carroll	6	1	6	6	2	4
e	46	Simeon-Carroll	6	2	2	1	1	4
c	47	Simeon-Carroll	6	1	6	1	2	4
d	48	Simeon-Carroll	6	1	3	1	2	4
3	49	Simeon-Carroll	6	1	-9	3	2	4

Site#	Form#	Route	Section	Location	Face	Side/side	Land	Condition
a	50	Simeon-Carroll	6	2	-9	2	2	4
c1	51	Onnie-Douglas	7	1	7	2	2	4
c2	52	Onnie-Douglas	7	1	4	1	1	4
c3	53	Onnie-Douglas	7	3	2	1	2	4
c4	54	Onnie-Douglas	7	1	8	2	2	4
c1	55	Leano-Paull	8	1	2	2	4	4
c2	56	Leano-Paull	8	1	4	1	4	4
c3	57	Leano-Paull	8	-9	2	3	2	4
c4	58	Leano-Paull	8	1	6	3	3	4
c5	59	Leano-Paull	8	1	1	1	2	4
c6	60	Leano-Paull	8	3	-9	1	3	2
c7	61	Leano-Paull	8	2	4	3	2	4
c8	62	Leano-Paull	8	1	2	2	3	4
c9	63	Leano-Paull	8	1	1	2	2	4
c10	64	Leano-Paull	8	2	8	3	2	4
c11	65	Leano-Paull	8	1	5	4	2	4
1	66	Leano-Kilburn	9	2	5	2	3	4
2	67	Leano-Kilburn	9	3	5	4	2	4
3	68	Leano-Kilburn	9	3	1	5	1	3
4	69	Leano-Kilburn	9	1	3	2	2	4
5	70	Leano-Kilburn	9	3	5	2	2	4
a	71	Knox-Murdock	10	1	4	2	3	4
c	72	Knox-Murdock	10	3	5	2	2	4
b	73	Knox-Murdock	10	1	4	-9	2	-9
c1	74	Paull-Kilburn loop	11	1	5	3	3	4
c2	75	Paull-Kilburn loop	11	1	3	2	2	4
c3	76	Paull-Kilburn loop	11	1	4	2	2	4
c4	77	Paull-Kilburn loop	11	1	3	3	2	4
c5	78	Paull-Kilburn loop	11	3	6	1	3	4
c6	79	Paull-Kilburn loop	11	1	1	2	4	4
c7	80	Paull-Kilburn loop	11	1	1	2	4	4
c8	81	Paull-Kilburn loop	11	1	4	3	2	4
c9	82	Paull-Kilburn loop	11	2	5	3	1	4
c10	83	Paull-Kilburn loop	11	1	5	2	2	4
c11	84	Paull-Kilburn loop	11	1	7	1	2	4
c1	85	Adventure-Irregular	12	1	1	1	1	4
c2	86	Adventure-Irregular	12	2	5	5	1	3
c3	87	Adventure-Irregular	12	3	5	6	1	4
c4	88	Adventure-Irregular	12	-9	7	-9	-9	-9
c5	89	Adventure-Irregular	12	3	3	3	-9	4
c6	90	Adventure-Irregular	12	3	3	20	1	3
c7	91	Adventure-Irregular	12	2	5	2	1	4
c8	92	Adventure-Irregular	12	3	6	3	1	4
c9	93	Adventure-Irregular	12	3	6	2	1	4
c10	94	Adventure-Irregular	12	1	7	4	1	4
c11	95	Adventure-Irregular	12	1	7	7	1	4
c12	96	Adventure-Irregular	12	1	6	3	1	4
c13	97	Adventure-Irregular	12	1	7	3	1	4

Site#	Pull	Slope	Gc-rock	Gc-soil	Gc-grass	Gc-moss	Gc-debris	Gc-other
c1	1	2	60	0	0	0	10	30
c3	1	2	50	30	-9	1	0	20
c2	1	2	80	0	0	10	10	0
c4	2	3	60	5	5	10	5	15
c5	1	2	65	0	5	10	5	15
c6	1	2	60	5	10	15	10	0
c7	2	2	60	10	0	15	5	10
c8	3	2	70	20	0	5	0	5
c9	4	2	60	5	5	10	10	10
c10	1	2	70	30	0	0	0	0
c11	1	1	60	0	0	20	10	10
1	1	2	0	70	20	0	10	0
2	-9	1	0	70	0	15	15	0
1	-9	1	80	10	0	5	5	0
4	1	2	60	25	0	15	0	0
3	3	1	60	30	0	52	5	0
7	4	1	75	10	0	15	0	0
6	2	2	80	15	0	5	0	0
5	4	2	60	20	0	10	10	0
8	1	1	80	10	0	10	0	0
9	1	2	80	10	5	5	0	0
a	1	2	30	60	0	0	10	0
b	2	2	75	5	5	15	0	0
c	1	2	85	0	0	15	0	0
d	2	4	0	0	0	60	0	0
e	2	2	80	0	0	20	0	0
f	2	2	70	0	0	30	0	0
a	3	1	75	100	0	15	0	0
b	1	2	70	15	0	15	0	0
c	3	3	80	15	0	5	0	0
d	1	2	85	5	10	0	0	0
f	2	2	85	5	0	10	0	0
e	2	1	20	40	0	30	10	0
g	2	2	80	5	0	10	5	0
h	2	2	50	40	0	0	10	0
a	2	2	85	0	5	10	0	0
c	2	2	80	0	0	20	0	0
b	2	2	70	0	0	30	0	0
e	1	1	90	0	0	10	0	0
d	2	2	70	0	0	30	0	0
e	2	1	85	0	0	15	0	0
f	2	2	70	0	0	30	0	0
h	1	1	60	0	10	20	0	0
g	4	1	2	80	0	0	20	0
f	1	2	60	0	10	20	0	10
e	1	1	40	0	0	60	0	0
c	3	2	70	10	0	20	0	0
d	2	2	90	5	0	5	0	0
3	1	1	50	20	0	30	0	0

Site#	Pull	Slope	Gc-rock	Gc-soil	Gc-grass	Gc-moss	Gc-debris	Gc-other
a	2	2	70	5	0	15	0	0
c1	2	1	0	80	10	10	0	0
c2	3	-9	0	80	5	15	0	0
c3	2	1	20	20	20	30	0	0
c4	1	1	0	70	0	5	25	0
c1	3	3	15	5	0	80	0	0
c2	4	2	60	10	10	10	10	0
c3	2	2	40	40	0	20	0	0
c4	2	2	70	10	10	50	50	0
c5	2	3	60	10	10	10	10	0
c6	3	2	-9	-9	-9	-9	-9	-9
c7	2	2	80	10	10	0	0	0
c8	2	3	50	20	0	20	10	0
c9	2	3	40	10	0	40	10	0
c10	2	3	50	5	0	40	5	0
c11	2	2	70	10	10	0	10	0
1	4	2	80	0	5	0	0	15
2	1	1	60	15	0	20	5	0
3	1	1	0	50	0	45	5	0
4	3	1	50	30	10	10	0	0
5	3	2	50	30	0	10	10	0
a	2	1	50	10	40	0	0	0
c	1	2	30	20	50	0	0	0
b	-9	2	5	75	0	20	0	0
c1	2	2	85	5	5	0	5	0
c2	2	2	70	20	0	10	0	0
c3	2	2	50	0	0	40	10	0
c4	2	1	50	5	20	20	5	0
c5	3	2	70	5	0	20	5	0
c6	5	2	60	20	0	10	10	0
c7	5	2	60	20	0	10	10	0
c8	2	-9	60	10	10	10	10	0
c9	1	2	50	20	10	10	10	0
c10	1	3	60	20	0	20	0	0
c11	2	1	70	5	0	20	5	0
c1	1	-9	40	0	0	30	10	20
c2	1	2	0	80	10	0	10	0
c3	1	-9	-9	-9	-9	-9	-9	-9
c4	-9	1	10	0	0	80	10	0
c5	2	-9	20	20	0	20	40	0
c6	1	1	10	50	0	20	0	20
c7	1	3	70	10	20	0	0	0
c8	1	2	60	20	0	0	20	0
c9	3	2	60	20	0	15	5	0
c10	1	1	80	10	0	0	10	0
c11	1	1	30	20	0	0	0	50
c12	1	1	80	0	0	0	0	20
c13	1	1	70	0	10	0	10	10

Site#	Specify	# of Sites	Flat	Angle	Firepit	Wood	Weather
c1	juniper, blueberry	-9	-9	-9	1	3	2
c3	lichen	5	2	3	1	3	1
c2	-9	1	1	0	0	2	1
c4	juniper	4	2	2	1	3	1
c5	juniper, dogwood	1	1	0	1	3	2
c6	-9	4	3	1	1	2	2
c7	juniper	3	3	0	1	3	2
c8	blueberries	2	0	2	1	3	3
c9	juniper	3	2	1	1	3	3
c10	-9	2	1	1	0	3	2
c11	juniper	2	1	1	2	3	2
1	-9	4	2	2	1	2	1
2	needle carpet	-9	-9	-9	-9	0	1
1	twigs & pine needes	3	-9	-9	1	3	1
4	-9	4	-9	-9	1	2	2
3	-9	2	1	1	1	2	2
7	-9	2	1	1	1	3	2
6	-9	1	1	0	1	2	2
5	-9	4	2	2	1	3	2
8	-9	2	2	0	1	3	2
9	-9	2	2	0	1	2	2
a	-9	4	1	0	0	3	2
b	-9	3	2	1	1	3	1
c	-9	2	1	1	0	3	1
d	-9	3	3	0	0	2	1
e	-9	1	0	1	0	2	1
f	-9	3	-9	-9	1	3	1
a	-9	3	3	0	0	2	2
b	-9	3	3	0	0	1	2
c	-9	2	2	0	1	2	2
d	-9	2	1	1	0	1	2
f	-9	2	1	1	1	3	2
e	-9	5	5	0	1	3	1
g	-9	3	0	3	1	2	1
h	-9	2	1	1	1	3	1
a	-9	1	1	0	1	2	2
c	-9	-9	-9	-9	0	2	1
b	-9	12	5	7	1	2	2
e	-9	3	3	0	1	2	2
d	-9	4	4	0	0	2	2
e	-9	2	2	0	1	1	3
f	-9	2	1	1	1	3	2
h	-9	2	2	0	1	2	3
g	-9	2	2	0	1	2	1
f	sweet gale	2	2	0	1	2	3
e	-9	3	3	0	1	2	2
c	-9	3	-9	-9	2	3	2
d	-9	1	1	0	0	1	1
3	-9	3	3	0	1	3	1

Site#	Specify	# of Sites	Flat	Angle	Firepit	Wood	Weather
a	-9	2	0	1	2	3	1
c1	-9	1	1	0	0	2	1
c2	-9	2	2	0	0	3	1
c3	-9	1	1	0	0	2	2
c4	-9	3	1	2	1	2	2
c1	-9	2	0	2	1	3	2
c2	-9	1	0	1	1	3	2
c3	-9	2	1	1	1	3	2
c4	-9	4	3	1	1	3	2
c5	-9	2	1	1	1	3	2
c6	-9	2	2	0	1	2	3
c7	-9	1	1	0	1	2	3
c8	-9	1	0	1	1	3	2
c9	-9	2	0	2	1	3	3
c10	-9	1	0	1	1	3	2
c11	-9	4	3	1	1	3	2
1	sand	2	0	2	1	3	2
2	-9	1	1	0	1	3	2
3	-9	4	4	0	1	3	1
4	-9	2	2	0	1	3	3
5	-9	3	3	0	1	3	2
a	-9	3	3	0	1	1	3
c	-9	5	-9	-9	1	2	2
b	-9	2	1	1	0	2	1
c1	-9	2	1	1	1	3	3
c2	-9	1	0	1	1	3	2
c3	-9	3	1	2	1	3	2
c4	-9	4	2	2	1	3	2
c5	-9	1	1	0	1	2	3
c6	-9	-9	-9	-9	1	3	2
c7	-9	-9	-9	1	3	0	2
c8	-9	1	1	0	1	3	1
c9	-9	2	1	1	1	2	2
c10	-9	1	0	1	1	3	2
c11	-9	1	0	1	0	3	3
c1	juniper	1	0	1	1	3	3
c2	lichen	4	2	2	1	2	3
c3	lichen	4	2	2	1	2	3
c4	-9	2	2	0	1	3	1
c5	-9	6	2	4	1	3	2
c6	sand	5	3	2	1	2	3
c7	-9	3	0	3	1	2	2
c8	-9	3	3	0	1	3	1
c9	-9	3	1	2	1	3	2
c10	-9	5	2	3	1	3	2
c11	juniper	1	1	0	0	3	1
c12	young pj	1	0	1	1	2	3
c13	juniper	3	2	1	0	2	3

Appendix C

Portage Attribute Data

Form#	Form#	Route	Section	Port-from	Port-to	Landing
P5-01	P5-01	Paull-Adventure	1	-9	-9	1
P5-02	P5-02	Paull-Adventure	1	-9	-9	1
P5-03	P5-03	Paull-Adventure	1	-9	-9	1
P5-04	P5-04	Paull-Adventure	1	-9	-9	1
P5-05	P5-05	Paull-Adventure	1	-9	-9	2
P5-06	P5-06	Paull-Adventure	1	-9	-9	1
P5-07	P5-07	Paull-Adventure	1	Aegear	-9	3
P5-08	P5-08	Paull-Adventure	1	-9	-9	1
P5-09	P5-09	Paull-Adventure	1	-9	-9	2
P5-10	P5-10	Paull-Adventure	1	Weltonlk	BearchCk	2
P5-11	P5-11	Paull-Adventure	1	WelkinLk	-9	2
P5-12	P5-12	Paull-Adventure	1	-9	-9	1
P5-13	P5-13	Paull-Adventure	1	-9	Adventrue	1
P5-14	P5-14	Paull-Adventure	1	-9	Adventrue	2
P5-15	P5-15	Chukini-Olive	2	Pineridge Rd	Chukuni R	2
P5-16	P5-16	Chukini-Olive	2	Chukuni R	Little Vermillion	2
P5-17	P5-17	Chukini-Olive	2	Chukuni R	Chukuni R	1
P5-18	P5-18	Chukini-Olive	2	Chukuni R	Chukuni R	1
P5-19	P5-19	Chukini-Olive	2	Chukuni R	Chukuni R	1
P5-20	P5-20	Chukini-Olive	2	Un Lk	Un Lk	2
P5-21	P5-21	Chukini-Olive	2	Un Lk	Un Lk	1
P5-22	P5-22	Chukini-Olive	2	Valhalla Lk	Trough Lk	3
P5-23	P5-23	Chukini-Olive	2	Trough Lk	Un Lk	1
P5-24	P5-24	Chukini-Olive	2	Un Lk	Un Lk	1
P5-25	P5-25	Chukini-Olive	2	Un Lk	Olive Lk	2
P5-26	P5-26	Chukini-Olive	2	Un Lk	Sabourin R	3
P5-27	P5-27	Chukini-Olive	2	Olive Lk	Un Lk	1
P5-28	P5-28	Murdock-Royd	3	Murdock	Laros	2
P5-29	P5-29	Murdock-Royd	3	Larus Lk	Bloodvein R	3
P5-30	P5-30	Murdock-Royd	3	Murdock Lk	Un Lk	1
P5-31	P5-31	Murdock-Royd	3	Un Lk	Un Lk	2
P5-32	P5-32	Murdock-Royd	3	Un Lk	Un Lk	2
P5-33	P5-33	Murdock-Royd	3	Un Lk	Un Lk	3
P5-34	P5-34	Murdock-Royd	3	Un Lk	Un Lk	3
P5-35	P5-35	Murdock-Royd	3	Un Lk	Un Lk	3
P5-36	P5-36	Murdock-Royd	3	Un Lk	Un Lk	1
P5-37	P5-37	Murdock-Royd	3	Un Lk	Un Lk	3
P5-38	P5-38	Murdock-Royd	3	Un Lk	Un Lk	2
P5-39	P5-39	Murdock-Royd	3	Un Lk	Un Lk	3
P5-40	P5-40	Olive-Knox	4	Un Lk	Un Lk	1
P5-41	P5-41	Olive-Knox	4	Un Lk	Un Lk	2
P5-42	P5-42	Olive-Knox	4	Un Lk	Un Lk	1
P5-43	P5-43	Olive-Knox	4	Un Lk	Un Lk	3
P5-44	P5-44	Olive-Knox	4	Un Lk	Un Lk	2
P5-45	P5-45	Olive-Knox	4	Un Lk	Un Lk	2
P5-46	P5-46	Olive-Knox	4	Un Lk	Un Lk	2
P5-47	P5-47	Olive-Knox	4	Un Lk	Un Lk	2
P5-48	P5-48	Olive-Knox	4	Un Lk	Knox Ck	3
P5-49	P5-49	Olive-Knox	4	Knox Ck	Knox Ck	1

Form#	Form#	Route	Section	Port-from	Port-to	Landing
P5-50	P5-50	Olive-Knox	4	Young Lk	Knox Ck	3
P5-51	P5-51	Olive-Knox	4	Knox Ck	Knox Ck	2
P5-52	P5-52	Olive-Knox	4	Knox Ck	Knox Ck	2
P5-53	P5-53	Royd-Simeon	5	Royd	Gammon	4
P5-54	P5-54	Royd-Simeon	5	Royd	Un Lk	1
P5-55	P5-55	Royd-Simeon	5	Un Lk	Un Lk	2
P5-56	P5-56	Royd-Simeon	5	Un Lk	Un Lk	2
P5-57	P5-57	Royd-Simeon	5	Un Lk	Un Lk	2
P5-58	P5-58	Royd-Simeon	5	Royd	Un Lk	2
P5-59	P5-59	Royd-Simeon	5	Un Lk	Un Lk	2
P5-60	P5-60	Royd-Simeon	5	Un Lk	Un Lk	2
P5-61	P5-61	Royd-Simeon	5	Un Lk	Un Lk	2
P5-62	P5-62	Royd-Simeon	5	Un Lk	Un Lk	1
P5-63	P5-63	Royd-Simeon	5	Un Lk	Simeon Ck	2
P5-64	P5-64	Royd-Simeon	5	Un Lk	Simeon Lk	2
P5-65	P5-65	Royd-Simeon	5	Simeon	Simeon Ck	3
P5-66	P5-66	Royd-Simeon	5	Creek	Simeon	2
P5-67	P5-67	Simeon-Carroll	6	Un Lk	Creek	2
P5-68	P5-68	Simeon-Carroll	6	Creek	Un Lk	1
P5-69	P5-69	Simeon-Carroll	6	Creek	Creek	2
P5-70	P5-70	Simeon-Carroll	6	Un Lk	Un Lk	6
P5-71	P5-71	Simeon-Carroll	6	Creek	Creek	1
P5-72	P5-72	Simeon-Carroll	6	Creek	Creek	2
P5-73	P5-73	Simeon-Carroll	6	Creek	Creek	1
P5-74	P5-74	Onnie-Douglas	7	Acess	-9	-9
P5-75	P5-75	Onnie-Douglas	7	-9	-9	2
P5-76	P5-76	Onnie-Douglas	7	-9	-9	2
P5-77	P5-77	Onnie-Douglas	7	-9	Onnie	1
P5-78	P5-78	Onnie-Douglas	7	Onnie	-9	1
P5-79	P5-79	Onnie-Douglas	7	-9	-9	1
P5-80	P5-80	Onnie-Douglas	7	-9	-9	1
P5-81	P5-81	Onnie-Douglas	7	-9	Telescope	1
P5-82	P5-82	Onnie-Douglas	7	Telescope	Embryo	1
P5-83	P5-83	Onnie-Douglas	7	Embryo	U Hatchet	-9
P5-84	P5-84	Onnie-Douglas	7	U Hatchet	Hatchet	1
P5-85	P5-85	Onnie-Douglas	7	Hatchet	Douglas L	1
P5-86	P5-86	Onnie-Douglas	7	-9	-9	1
P5-87	P5-87	Onnie-Douglas	7	-9	Road Access	3
P5-100	P5-100	Leano-Paull	8	Paull Lk	Paull Lk	2
P5-88	P5-88	Leano-Paull	8	Leano L	Bunny	1
P5-89	P5-89	Leano-Paull	8	Bunny L	Bunny	1
P5-90	P5-90	Leano-Paull	8	Bunny L	small lake west	2
P5-91	P5-91	Leano-Paull	8	-9	-9	1
P5-92	P5-92	Leano-Paull	8	-9	-9	2
P5-93	P5-93	Leano-Paull	8	-9	-9	2
P5-94	P5-94	Leano-Paull	8	-9	-9	3
P5-95	P5-95	Leano-Paull	8	-9	Jake	2
P5-96	P5-96	Leano-Paull	8	Jake Lk	Paull	4
P5-97	P5-97	Leano-Paull	8	-9	Paull	2

Form#	Form#	Route	Section	Port-from	Port-to	Landing
P5-98	P5-98	Leano-Paull	8	Paull Lk	Paull Lk	2
P5-99	P5-99	Leano-Paull	8	Paull Lk	Paull Lk	2
P5-101	P5-101	Kilburn Loop	9	Leano	Leano Ck	2
P5-102	P5-102	Kilburn Loop	9	Leano Ck	Leano Ck	1
P5-103	P5-103	Kilburn Loop	9	Leano Ck	Leano Ck	2
P5-104	P5-104	Kilburn Loop	9	Leano Ck	Un Lk	2
P5-016	P5-016	Knox-Murdock	10	Knox Lk	Knox Lk	2
P5-105	P5-105	Knox-Murdock	10	Knox Lk	Un Lk	1
P5-107	P5-107	Knox-Murdock	10	Knox Lk	Knox Lk	4
P5-108	P5-108	Knox-Murdock	10	Knox Lk	Knox Lk	3
P5-109	P5-109	Paull-Kilburn loop	11	Aside Lk	Paull Lk	1
P5-110	P5-110	Paull-Kilburn loop	11	Paull	-9	2
P5-111	P5-111	Paull-Kilburn loop	11	-9	-9	2
P5-112	P5-112	Paull-Kilburn loop	11	-9	-9	2
P5-113	P5-113	Paull-Kilburn loop	11	-9	-9	1
P5-114	P5-114	Paull-Kilburn loop	11	-9	-9	1
P5-115	P5-115	Paull-Kilburn loop	11	-9	-9	2
P5-116	P5-116	Paull-Kilburn loop	11	-9	-9	2
P5-117	P5-117	Paull-Kilburn loop	11	-9	-9	2
P5-118	P5-118	Paull-Kilburn loop	11	-9	Kilburn Lk	2
P5-119	P5-119	Paull-Kilburn loop	11	-9	Kilburn Lk	2
P5-120	P5-120	Paull-Kilburn loop	11	-9	-9	1
P5-121	P5-121	Paull-Kilburn loop	11	-9	-9	1
P5-122	P5-122	Paull-Kilburn loop	11	-9	-9	1
P5-123	P5-123	Paull-Kilburn loop	11	-9	-9	1
P5-124	P5-124	Paull-Kilburn loop	11	-9	-9	1
P5-125	P5-125	Paull-Kilburn loop	11	-9	-9	3
P5-126	P5-126	Paull-Kilburn loop	11	-9	-9	2
P5-127	P5-127	Paull-Kilburn loop	11	-9	-9	4
P5-128	P5-128	Paull-Kilburn loop	11	-9	-9	1
P5-129	P5-129	Paull-Kilburn loop	11	-9	-9	3
P5-130	P5-130	Paull-Kilburn loop	11	-9	-9	2
P5-131	P5-131	Paull-Kilburn loop	11	-9	-9	3
P5-132	P5-132	Paull-Kilburn loop	11	-9	-9	1
P5-133	P5-133	Paull-Kilburn loop	11	-9	-9	4
P5-134	P5-134	Paull-Kilburn loop	11	-9	-9	1
P5-135	P5-135	Paull-Kilburn loop	11	-9	Paull	2
P5-136	P5-136	Paull-Kilburn loop	11	-9	-9	2
P5-137	P5-137	Adventure-Irregular	12	Adventure	Haven	2
P5-138	P5-138	Adventure-Irregular	12	-9	-9	2
P5-139	P5-139	Adventure-Irregular	12	-9	Haven	1
P5-140	P5-140	Adventure-Irregular	12	Adventure	-9	1
P5-141	P5-141	Adventure-Irregular	12	-9	-9	2
P5-142	P5-142	Adventure-Irregular	12	-9	-9	1
P5-143	P5-143	Adventure-Irregular	12	-9	-9	1
P5-144	P5-144	Adventure-Irregular	12	-9	Bulging	1
P5-145	P5-145	Adventure-Irregular	12	Bulging	-9	4
P5-146	P5-146	Adventure-Irregular	12	Bulging	South	2
P5-147	P5-147	Adventure-Irregular	12	Haggar Lk	South	3

Form#	Form#	Route	Section	Port-from	Port-to	Landing
P5-148	P5-148	Adventure-Irregular	12	-9	Mather Lk	-9
P5-149	P5-149	Adventure-Irregular	12	Haggar Lk	-9	3
P5-150	P5-150	Adventure-Irregular	12	-9	-9	1
P5-151	P5-151	Adventure-Irregular	12	-9	-9	3
P5-153	P5-153	Adventure-Irregular	12	-9	-9	4
P5-154	P5-154	Adventure-Irregular	12	-9	-9	1
P5-155	P5-155	Adventure-Irregular	12	-9	Beanish	1
P5-156	P5-156	Adventure-Irregular	12	Beanish	Beanish W	2
P5-157	P5-157	Adventure-Irregular	12	-9	Irregular	2
P5-158	P5-158	Adventure-Irregular	12	Irregular	-9	2
Pr-152	Pr-152	Adventure-Irregular	12	-9	-9	2

Form#	Side/side landwidth	Launch	Area	Length	Width	Wet	Dry
P5-01	1	6	3	4	250	2.5	-9	-9
P5-02	1	-9	2	4	100	-9	50	50
P5-03	1	4	1	5	150	3	-9	100
P5-04	2	5	2	3	80	-9	5	95
P5-05	10	3	1	3	120	2.5	0	100
P5-06	1	3	2	3	450	4	0	100
P5-07	1	3	2	4	150	4	0	100
P5-08	1	3	2	3	550	1.5	30	70
P5-09	1	3	2	4	100	3	-9	-9
P5-10	2	3	1	5	20	3	0	100
P5-11	1	4	1	4	550	2.5	5	95
P5-12	1	-9	1	4	350	2	60	40
P5-13	1	5	2	3	250	2	0	100
P5-14	1	3	1	3	5	3	0	100
P5-15	4	1	1	1	154	4	80	20
P5-16	1	1	2	1	285p	3	20	80
P5-17	2	4	1	5	-9	3	25	75
P5-18	1	5	1	4	-9	3	40	60
P5-19	2	5	1	5	-9	3	20	80
P5-20	1	6	1	6	-9	4	3	97
P5-21	2	6	3	3	-9	3	5	95
P5-22	1	1	3	4	-9	4	0	100
P5-23	2	5	1	5	-9	4	1	99
P5-24	3	4	2	4	-9	3	15	85
P5-25	2	5	1	5	-9	3	0	100
P5-26	2	3	1	5	770	3	20	80
P5-27	4	6	2	4	-9	3	5	95
P5-28	2	1	1	3	-9	3	15	85
P5-29	3	3	2	3	-9	3	0	100
P5-30	1	2	2	4	-9	3	0	100
P5-31	1	6	1	4	-9	3	0	100
P5-32	2	-9	2	6	-9	3	15	85
P5-33	2	3	1	6	-9	3	1	99
P5-34	2	3	2	3	-9	3	0	100
P5-35	1	1	3	3	-9	3	0	1000
P5-36	2	6	2	6	-9	3	4	96
P5-37	1	3	3	4	-9	3	0	100
P5-38	2	1	2	4	-9	3	50	50
P5-39	-9	3	1	6	-9	3	25	75
P5-40	1	-9	2	-9	-9	3	0	100
P5-41	4	3	2	3	-9	3	0	100
P5-42	1	6	3	4	-9	3	2	98
P5-43	2	6	2	4	-9	3	10	90
P5-44	3	4	1	5	-9	3	10	90
P5-45	2	5	2	2	-9	3	15	85
P5-46	2	1	2	-9	-9	3	5	95
P5-47	3	3	1	-9	-9	3	5	95
P5-48	3	4	1	5	-9	3	3	97
P5-49	2	5	1	5	-9	3	30	70

Form#	Side/side	landwidth	Launch	Area	Length	Width	Wet	Dry
P5-50	3	4	1	5	-9	3	0	100
P5-51	2	3	1	5	-9	3	2	98
P5-52	2	5	1	5	-9	3	5	98
P5-53	2	4	3	150	3	5	95	3
P5-54	2	5	1	2	-9	20	10	90
P5-55	1	3	2	3	-9	3	0	100
P5-56	1	3	1	6	-9	3	40	60
P5-57	2	1	2	6	-9	2	0	100
P5-58	1	3	3	3	890	3	15	85
P5-59	4	4	1	2	-9	3	10	90
P5-60	2	1	2	3	-9	3	0	100
P5-61	2	1	2	3	-9	3	0	100
P5-62	1	1	2	1	-9	4	0	100
P5-63	4	1	1	6	-9	3	30	70
P5-64	1	1	2	1	-9	3	0	100
P5-65	3	2	3	-9	3	0	100	2
P5-66	1	2	6	-9	3	30	70	3
P5-67	1	6	1	1	-9	3	0	100
P5-68	3	3	1	5	-9	3	0	1
P5-69	1	4	1	1	-9	20	0	100
P5-70	1	-9	3	-9	-9	-9	-9	-9
P5-71	1	3	2	3	-9	3	10	90
P5-72	2	3	3	1	-9	3	0	100
P5-73	1	5	1	1	-9	3	5	95
P5-74	2	-9	1	5	300	3	50	50
P5-75	2	4	1	4	30	5	0	100
P5-76	1	3	1	5	350	0	30	70
P5-77	3	5	1	1	300	3	10	90
P5-78	2	4	2	3	150	3	0	100
P5-79	1	5	1	-9	115	3.5	5	95
P5-80	1	4	1	4	160	3	0	100
P5-81	1	5	1	6	200	3	20	850
P5-82	1	5	1	4	220	3	10	90
P5-83	2	3	3	5	400	3	15	85
P5-84	2	5	1	3	450	3	20	80
P5-85	2	3	1	3	150	3	0	1000
P5-86	2	1	1	1	160	3	40	60
P5-87	-9	3	1	3	220	4	0	100
P5-100	2	6	1	6	350	1	30	70
P5-88	1	1	2	4	300	2	10	90
P5-89	1	5	1	5	15	1	10	90
P5-90	4	1	4	4	150	-9	0	100
P5-91	1	1	3	6	85	2	0	100
P5-92	2	4	2	4	85	2	30	70
P5-93	1	4	3	4	200	2	0	100
P5-94	1	3	3	4	200	2	30	70
P5-95	1	4	4	6	40	2	0	100
P5-96	2	3	1	1	450	1	0	100
P5-97	2	4	1	6	200	1	10	90

Form#	Side/side	landwidth	Launch	Area	Length	Width	Wet	Dry
P5-98	1	4	2	5	50-75	2	0	100
P5-99	2	6	1	6	275	1	40	60
P5-101	2	1	1	5	395.2	2	20	80
P5-102	1	3	1	1	120	2	5	95
P5-103	2	4	1	6	3.2	2	0	100
P5-104	1	1	1	4	96	2	20	80
P5-016	1	3	3	2	-9	2.3	0	100
P5-105	2	2	1	1	-9	3	25	75
P5-107	2	1	2	1	-9	3	5	95
P5-108	2	3	2	1	-9	2.3	5	95
P5-109	2	5	2	4	300	1	0	100
P5-110	1	4	1	6	350	1	20	80
P5-111	-9	4	1	5	200	1	50	50
P5-112	1	4	2	5	140	1	0	100
P5-113	3	4	1	4	35	1	0	100
P5-114	1	4	2	4	35	2	0	100
P5-115	2	4	1	4	120	1	0	100
P5-116	1	3	1	6	80	1	30	70
P5-117	1	4	2	4	70	10	50	50
P5-118	2	4	2	3	150	2	5	95
P5-119	1	4	3	3	200	1	0	100
P5-120	2	4	1	6	350	1	60	40
P5-121	1	6	3	3	700	1.5	5	95
P5-122	1	5	3	4	750	2	40	60
P5-123	1	4	1	5	50	2	50	50
P5-124	1	4	1	5	300	1	5	95
P5-125	1	3	2	3	150	2.5	0	100
P5-126	2	5	1	5	150	1	5	95
P5-127	2	3	2	5	375	1.5	0	100
P5-128	1	5	3	3	300	3	0	100
P5-129	1	3	1	5	10	1.5	5	95
P5-130	-9	5	2	5	200	1	5	95
P5-131	1	3	1	6	15	1.5	5	95
P5-132	1	6	2	4	470	0.5	60	40
P5-133	1	4	1	4	100	0.5	0	100
P5-134	1	4	1	6	10	1	2080	1
P5-135	1	4	1	4	70	1	0	100
P5-136	2	5	3	5	50	1	-9	-9
P5-137	2	3	1	5	270	2.5	0	100
P5-138	-9	4	-9	-9	1	-9	-9	-9
P5-139	2	5	2	3	370	3	-9	-9
P5-140	-9	5	2	3	25	2	-9	-9
P5-141	2	5	2	3	100	3	0	100
P5-142	1	5	3	5	300	4	-9	-9
P5-143	2	5	-9	5	150	1.5	5	95
P5-144	1	4	2	3	200	2.5	-9	-9
P5-145	2	3	1	3	100	2.5	0	100
P5-146	1	4	2	4	40	3	-9	-9
P5-147	1	3	2	3	70	2.5	0	100

Form#	Side/side	landwidth	Launch	Area	Length	Width	Wet	Dry
P5-148	2	5	2	3	300	3	5	95
P5-149	3	2	4	50	-9	-9	-9	2
P5-150	2	4	3	3	200	1.5	0	100
P5-151	2	3	1	1	110	2	5	95
P5-153	1	2	3	25	3	20	80	2
P5-154	2	3	1	5	90	4	0	100
P5-155	2	5	2	3	110	3	5	95
P5-156	1	3	1	5	150	3	-9	-9
P5-157	1	5	2	5	840	3	10	90
P5-158	2	3	1	4	150	2	10	90
Pr-152	1	3	3	50	2	0	100	2

Form#	Slope	Falls	Rapids	Rockdam	Lake	Drop/rise	Scenic
P5-01	-9	1	0	0	1	-9	2
P5-02	3	1	0	0	0	10	2
P5-03	1	-9	0	0	1	-9	2
P5-04	-9	0	0	0	1	2	2
P5-05	1	-9	0	0	0	5	3
P5-06	-9	0	0	0	1	-9	2
P5-07	3	0	0	0	1	5	2
P5-08	4	0	0	0	1	5	1
P5-09	3	0	0	0	1	15	2
P5-10	2	0	1	0	0	2	3
P5-11	4	0	0	0	1	5	2
P5-12	3	1	1	-9	1	-9	2
P5-13	2	0	1	0	0	10	3
P5-14	1	0	0	0	0	1.5	2
P5-15	3	0	1	0	0	5-10	2
P5-16	2	1	0	0	0	10	2
P5-17	1	0	1	0	0	4-5	1
P5-18	1	0	1	0	0	5	1
P5-19	2	0	1	0	0	15	2
P5-20	3	1	0	0	0	30	2
P5-21	3	0	1	0	0	10	2
P5-22	2	0	1	0	0	5	2
P5-23	2	0	1	0	0	5	2
P5-24	0	0	0	0	1	-9	2
P5-25	4	0	0	0	0	-9	3
P5-26	3	1	0	0	0	25	3
P5-27	5	0	0	0	0	-9	2
P5-28	2	1	1	0	0	15	3
P5-29	2	1	0	0	0	15+	3
P5-30	2	0	0	0	1	-9	2
P5-31	3	0	0	0	1	-9	2
P5-32	3	0	0	0	1	-9	1
P5-33	5	0	0	0	0	-9	1
P5-34	3	0	1	0	0	10	3
P5-35	4	0	1	0	0	10	2
P5-36	3	0	1	0	0	5	2
P5-37	3	1	1	0	0	3	2
P5-38	2	0	1	0	0	15+	3
P5-39	3	0	0	0	1	-9	2
P5-40	3	0	1	0	0	<5	2
P5-41	2	0	0	0	0	4	2
P5-42	2	0	0	0	0	5	2
P5-43	3	0	0	0	1	-9	2
P5-44	3	0	0	0	0	-9	2
P5-45	1	0	1	1	0	3	2
P5-46	1	0	0	0	0	-9	1
P5-47	4	1	0	0	0	20	2
P5-48	2	0	1	0	0	5	1
P5-49	3	0	1	0	0	15	1

Form#	Slope	Falls	Rapids	Rockdam	Lake	Drop/rise	Scenic
P5-50	3	1	0	0	0	10	2
P5-51	2	0	1	0	0	8	3
P5-52	3	1	0	0	0	30	1
P5-53	0	0	0	1	0	10	2
P5-54	3	0	1	0	0	20	0
P5-55	2	0	0	0	0	5	2
P5-56	3	0	0	0	1	-9	2
P5-57	3	0	0	0	1	-9	2
P5-58	4	0	0	0	1	-9	2
P5-59	2	0	1	0	0	-9	2
P5-60	2	0	0	0	0	-9	2
P5-61	3	1	0	0	0	20	1
P5-62	1	0	0	0	1	-9	1
P5-63	2	0	1	0	0	10	2
P5-64	3	0	0	0	0	-9	2
P5-65	0	0	1	0	0	10	2
P5-66	1	0	1	0	0	-9	2
P5-67	1	0	1	0	0	2	2
P5-68	2	0	1	0	0	5	2
P5-69	3	1	0	0	0	10	2
P5-70	3	1	1	0	0	15	2
P5-71	1	0	1	0	0	5	1
P5-72	3	0	1	0	0	5	1
P5-73	2	0	1	0	0	5	1
P5-74	2	0	0	0	0	10	2
P5-75	1	1	0	0	0	2	2
P5-76	2	0	0	1	0	5	1
P5-77	1	0	0	0	0	0	2
P5-78	2	0	0	0	1	0	2
P5-79	1	0	0	0	0	0	2
P5-80	2	0	0	0	0	0	1
P5-81	1	0	0	0	1	0	1
P5-82	2	0	0	1	0	0	2
P5-83	3	0	0	0	1	0	2
P5-84	3	0	0	0	1	5	2
P5-85	3	0	0	0	1	15	2
P5-86	1	0	0	0	1	5	2
P5-87	4	0	0	0	1	30	2
P5-100	5	0	0	0	1	20	2
P5-88	2	0	1	0	0	5	2
P5-89	1	0	0	0	1	0	2
P5-90	2	0	0	0	1	0	2
P5-91	2	0	0	1	0	-9	2
P5-92	3	0	1	0	0	1	1
P5-93	2	1	0	0	0	5	3
P5-94	3	0	0	0	0	8	3
P5-95	2	1	0	0	0	5	2
P5-96	4	0	0	0	1	10	2
P5-97	5	0	0	0	1	10	2

Form#	Slope	Falls	Rapids	Rockdam	Lake	Drop/rise	Scenic
P5-98	1	0	0	1	0	1	1
P5-99	2	0	0	0	0	10	2
P5-101	3	0	1	0	0	-9	2
P5-102	3	0	1	0	0	-9	1
P5-103	1	0	1	0	0	1	1
P5-104	2	1	0	0	0	10	1
P5-016	4	1	0	0	0	15	2
P5-105	3	0	0	0	0	-9	2
P5-107	3	1	1	1	1	30	3
P5-108	4	1	0	0	0	25	3
P5-109	3	0	1	0	0	-9	2
P5-110	4	0	0	0	1	10	2
P5-111	1	0	0	0	0	0	1
P5-112	4	0	1	0	1	5	2
P5-113	1	0	0	0	0	.5	2
P5-114	2	0	0	1	0	.5	2
P5-115	4	0	0	0	1	5	2
P5-116	4	0	0	0	0	5	2
P5-117	2	0	0	0	0	.5	2
P5-118	3	0	0	0	1	5	2
P5-119	3	0	0	0	1	10	1
P5-120	1	0	0	1	1	5	2
P5-121	4	0	0	0	1	10	2
P5-122	4	0	0	0	1	20	2
P5-123	2	0	0	0	1	1	2
P5-124	3	0	0	0	1	15	2
P5-125	3	0	0	0	1	5	2
P5-126	2	0	0	0	1	10	2
P5-127	4	0	0	1	1	10	-9
P5-128	3	0	0	0	1	15	2
P5-129	3	0	0	0	0	1	2
P5-130	3	0	0	0	1	5	2
P5-131	2	0	0	0	1	1	2
P5-132	3	0	0	0	1	5	2
P5-133	5	-9	-9	-9	-9	0	2
P5-134	0	0	0	1	0	0	2
P5-135	1	0	0	0	1	0	2
P5-136	2	0	0	0	1	0	2
P5-137	2	0	0	0	1	10	2
P5-138	-9	0	0	0	0	0	2
P5-139	3	0	0	0	1	10	2
P5-140	1	0	0	0	0	2	3
P5-141	2	0	1	0	0	8	2
P5-142	3	0	0	0	1	0	2
P5-143	1	0	0	0	1	10	2
P5-144	2	0	0	0	1	0	2
P5-145	2	1	0	0	0	10	3
P5-146	1	0	1	0	0	1	2
P5-147	2	0	1	0	0	1	2

Form#	Slope	Falls	Rapids	Rockdam	Lake	Drop/rise	Scenic
P5-148	2	0	0	0	0	20	2
P5-149	-9	0	1	0	0	2	2
P5-150	4	0	1	0	0	10	3
P5-151	2	0	1	0	0	15	3
P5-153	0	0	1	0	0	1.5	2
P5-154	2	0	0	0	1	0	2
P5-155	2	0	0	0	1	0	2
P5-156	2	0	0	0	1	0	2
P5-157	4	0	0	0	1	0	2
P5-158	2	0	0	0	1	0	1
Pr-152	0	0	1	0	0	0	2