



FOREST MANAGEMENT NOTE

Note 62

Northern Forestry Centre

CAMPERS AT FOREST RECREATION AREAS IN WEST-CENTRAL ALBERTA: A USER PROFILE

Identifying the users of forested lands and understanding their activities and preferences are fundamental to incorporating nontimber uses and values in forest management (McFarlane and Boxall 1993). One group of users of forested public land in Canada is recreationists. The needs and concerns of recreationists have gained importance as industries become more involved in managing recreational opportunities within forest management areas and as stakeholder groups demand more involvement in decision making.

A prominent recreational use of public lands in parts of Alberta is camping. Camping on public land in the province has a long history, but it was not until the early 1960s that the Alberta Forest Service established formalized campgrounds in response to an increasing number of people camping randomly in public forests. While random camping is legal, concern over environmental impacts and wildfire resulting from careless use of campfires led to the establishment of forest recreation areas (FRAs) at some of the more popular random camping sites. The FRAs were developed with the objective of concentrating use to specific managed areas.

Campers' recreational activities can occur in close proximity to forestry operations. This means that campers in FRAs are an important stakeholder group directly affected by changes in the forest, whose needs should be considered in public land

management. Incorporating the needs of FRA campers in management decisions is difficult because there is a lack of information on who they are, their activities, and their recreation management preferences.

This forest management note summarizes results from a study of FRA users in the Rocky-Clearwater Forest (RCF) of Alberta during 1994. It discusses characteristics of campers, and their recreational activities on public lands, preferences for facilities and services at FRAs, and satisfaction with FRAs. It also provides insight into how the needs of this constituent can be incorporated into forest management.

METHODS

Study Area

The RCF was chosen as the study area because of its long history for both extractive and non-extractive use. Situated in the foothills of the Rocky Mountains, the RCF covers an area of about 18 000 km² between the Banff National Park boundary to the west and Rocky Mountain House to the east (Fig. 1). The Pembina and Clearwater rivers border the forest to the north and the south, respectively. Most of the land within the forest is publicly owned. Forestry is a prominent industrial user of the area; there are two forest management



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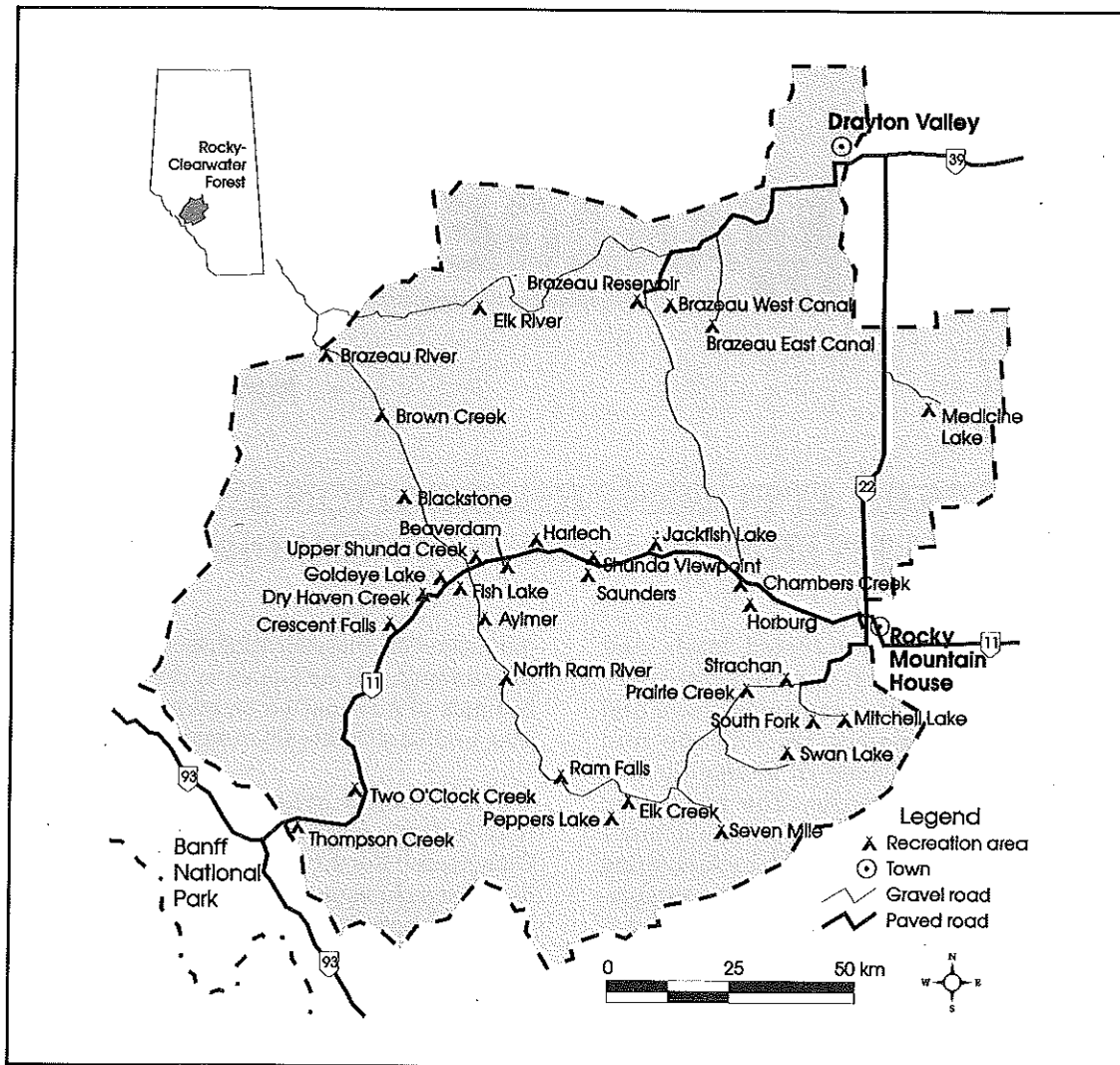


Figure 1. Rocky-Clearwater forest recreation areas.

agreements, several smaller quota and permit holders, and an annual allowable cut of over 1.3 million m^3 (Alberta Environmental Protection 1993).

The forest is administered by Alberta Environmental Protection, Land and Forest Service. Forest recreation areas provide a semiprimitive, vehicle-based camping opportunity. In general, FRAs differ from other campgrounds in the province in that they are less developed and provide fewer services and facilities. The campgrounds offer basic facilities, including gravel tent pads, picnic tables, fire rings, pit or vault toilets, water pumps, garbage containers, and firewood.

Data Collection

Three information-collection mechanisms were used in the study. Information was collected from the self-registration camping fee permits, on-site interviews, and a mail survey. Each mechanism collected different information. This note examines information gathered from two of these mechanisms: the on-site and mail-survey segments of the study.

On-site surveys were conducted at 10 of the 33 FRAs at which camping fees were collected in 1994: Brazeau Reservoir, Medicine Lake, Chambers Creek, Prairie Creek, Fish Lake, Galdeye Lake, Ram Falls, Crescent Falls, Thompson Creek, and

Two O'Clock Creek (Fig. 1). Data collection was performed during week days and weekends from the Victoria Day long weekend in May through the Labour Day long weekend in September. A total of 1006 Alberta residents were interviewed. Of these, 964 agreed to participate in a follow-up mail survey. The on-site survey collected information on use patterns, trip characteristics, and names and addresses for the mail survey.

The mail survey, conducted during the months of January through March 1995, collected information on camping experience, attitudes toward forest management, management preferences, and socio-economic data. A total of 805 completed questionnaires were returned. Adjusting for undeliverables, this represented an 87% response rate.

RESULTS

Camping Experience

Campers that visited the FRAs in the RCF appear to be experienced campers. Of those interviewed, 82% had more than 10 years of camping experience and 36% had more than 25 years. Many campers were also familiar with the FRA at which they were interviewed; about 30% had made between one and five trips to the FRA in the previous 10 years, and 25% had made more than five trips. One group of campers (44%), however, had not visited the FRA within the previous 10 years, suggesting they were first-time visitors.

Camping Characteristics

Campers were asked to describe their type of stay at the FRA. Most of the campers (74%) were on

weekend or overnight camping trips, 12% classified their trips as stops on vacation tours or overnight travel accommodation stops, and 9% stated that the FRA was their major vacation destination. This suggests that FRAs are serving primarily as weekend camping destinations and one-night stopovers.

Campers were also asked about their frequency of trips to various types of campgrounds in Alberta: national parks, provincial parks, FRAs, and public land not officially designated as campgrounds (random camping). Seventy-six percent of respondents stated that they usually visit national parks at least once a year, 80% usually make at least one trip to a provincial park, and 93% usually take at least one trip to a FRA (Table 1). Over half (54%) of the campers indicated that they usually take at least one trip to random areas and 12% indicated that they take six or more trips to such areas each year. This suggests that FRA users may also comprise a large proportion of random campers on public lands.

Campers at the FRAs used a variety of camping equipment; 33% used tents, 29% used trailers, 14% used recreational vehicles, and the remaining 24% used tent trailers, vans, or truck campers. The type of equipment used varied by FRA; those accessible only by narrow, steep gravel roads hosted a much larger proportion of tents and fewer recreational vehicles and trailers. For example, Ram Falls, which is accessed by about 70 km of narrow, gravel road, had 59% of its campers use tents, and Crescent Falls, which has a road with a very steep hill and a small stream without a bridge, had 47% with tents.

Recreational Activities

Campers participated in a variety of activities while visiting the FRAs (Table 1). More-popular

Table 1. Distribution (%) of campers taking annual camping trips to national parks, provincial parks, forest recreation areas, and random camping areas

Number of trips annually	National parks	Provincial parks	Forest recreation areas	Random-camping areas
0	24.4	20.1	7.3	45.7
1-5	71.2	69.0	64.7	42.7
6-10	3.4	8.9	19.2	7.5
11-15	0.3	0.9	6.0	1.9
16-20	0.4	0.8	1.3	1.4
More than 20	0.4	0.3	1.5	0.8

activities included those that require minimal facility development. Most respondents relaxed at their site (99%), took walks or day hikes (94%), socialized with other campers (76%), went driving or sightseeing (66%), fished (61%), and viewed wildlife (58%) (Table 2).

Respondents were asked which activity they engaged in the most while staying at the FRA. Forty-five percent of respondents chose relaxing at the site as the most-popular activity, 20% chose fishing, 18% chose walking or day hikes, and 6% chose socializing with other campers. These results varied across some of the FRAs. For example, 33% of respondents at Goldeye Lake, which is stocked, indicated fishing was the most popular activity.

Management Preferences

In the mail survey, respondents rated the desirability of facilities and services at FRA campgrounds on a scale of 1 to 5, in which 1 represented "not at all desirable" and 5 represented "very desirable". Desirable items (mean > 3.0) included facilities and services that connote minimal development. These included maps of the area showing trails, fishing areas, and other recreational opportunities, a FRA within a 1- to 3- hour drive from home, facilities for other activities such as hiking, fishing or biking, and security patrols (Table 3).

Table 2. Distribution of campers (%) participating in activities at forest recreation areas in the Rocky-Clearwater Forest

Activity	Participating in activity	Activity participated in most
Fishing	61.4	20.3
Walking or day hikes	94.2	18.0
Backpacking (overnight)	1.0	0.2
Mountain-biking	19.0	2.5
Driving or sightseeing	66.4	2.5
Birdwatching	25.0	0.2
Watching, studying or photographing other wildlife	58.3	0.6
Canoeing or boating	28.4	2.2
Swimming	30.8	1.3
Horseback riding	4.7	0.1
Using off-highway vehicles	5.4	1.1
Socializing	76.1	5.6
Relaxing	98.7	45.0
Other	2.8	0.4

Items that require a high level of development were rated as undesirable (mean < 3.0). These included facilities such as motels, hotels, commercial lodges, fast-food outlets, and services such as bike, boat, and horse rentals, camping supply stores, and firewood sales. Even many of the standard services provided at other campgrounds were rated as undesirable for FRA campgrounds. For example, flush toilets, showers, and paved roads to the campground entrance were considered undesirable. This indicates that respondents prefer FRAs to continue to provide a more-natural type of camping opportunity than that offered at most other campgrounds in the province.

Camper Satisfaction

Overall, 84% of respondents were satisfied with the operation of the FRAs. Of the satisfied group, 46% were very satisfied. The mean rating on a scale of 1 to 5 was 4.1, with 1 representing "very dissatisfied" and 5 representing "very satisfied". Reasons people gave for being dissatisfied related primarily to the cleanliness of toilets, disturbance from other campers, and quality of the firewood.

When asked who should own and operate the FRAs, 70% of campers supported the current situation of predominantly government-owned and operated campgrounds, 28% expressed the desire for provincial government ownership in conjunction with private-sector operation, and 3% were in favor of private ownership and operation of the FRAs.

The majority of campers were satisfied with the drive to the FRA; 92% found the trip to be enjoyable, and of these, 58% found the trip to be very enjoyable. Many of the campers who found the drive unenjoyable were interviewed at Ram Falls, where a common reason cited for dissatisfaction was the narrow, gravel road to the FRA. Under good weather conditions this road is extremely dusty, and in wet weather conditions, it can be difficult to negotiate.

Table 3. Distribution (%) and means of management preference item scores

Management item	1 Not at all desirable	2 Somewhat undesirable	3 Neutral	4 Somewhat desirable	5 Very desirable	Mean (Standard deviation)
Fast-food outlet	80.3	14.3	3.3	1.3	1.0	1.3 (0.7)
Hotels or motels	78.0	15.0	5.3	0.9	0.9	1.3 (0.7)
Commercial lodges	67.0	21.4	8.9	1.3	1.5	1.5 (0.8)
Bike rentals	41.6	29.6	18.7	6.5	3.6	2.0 (1.1)
Horse rentals	37.9	23.5	23.5	10.8	4.3	2.2 (1.2)
Rowboat or canoe rentals	34.1	28.9	22.2	9.9	4.9	2.2 (1.2)
Stores selling food and camping supplies	33.5	24.3	23.8	11.5	6.8	2.3 (1.2)
Bundles of firewood for sale	39.3	13.6	18.7	15.0	13.5	2.5 (1.5)
Flush toilets	26.3	26.0	24.6	12.6	10.5	2.5 (1.3)
Paved road to the camp- ground entrance	26.1	23.2	28.2	11.8	10.8	2.6 (1.3)
Showers	17.7	23.1	27.2	17.9	14.1	2.9 (1.3)
Security patrols	6.0	11.4	25.1	27.5	30.0	3.6 (1.2)
Facilities for other activities such as hiking, fishing, or biking	3.3	5.8	17.0	28.9	45.0	4.1 (1.1)
A forest recreation area within a 1- to 3-hour drive from home	4.0	4.0	12.5	26.6	52.9	4.2 (1.1)
Maps showing trails, fishing areas, and other recreational opportunities	1.5	2.4	7.4	26.8	61.9	4.5 (0.8)

Nevertheless, these results indicate that the majority of campers are satisfied with access to the FRAs and with government provision and standards of facilities and services offered.

Socioeconomic Characteristics

FRA users differed from the general Alberta population with respect to several socioeconomic characteristics (Table 4). First, residents of the two major metropolitan areas were proportionally underrepresented at the FRAs during 1994. Only 37% of visitors were from Edmonton or Calgary, compared with 52% coming from the general population of Alberta (Statistics Canada 1991). Most visitors were from rural communities or smaller cities and towns located within a 1- to 2-hour drive of the forest. Secondly, FRA campers came from households with more people and higher incomes than the provincial average. Whether these findings

are related to the geographical areas in which the visitors reside or if the FRAs appeal to particular socioeconomic segments of the Alberta population is unknown, but worthy of further study.

DISCUSSION

The results of this study suggest that FRAs in the RCF serve a specific market and provide a unique recreational opportunity. The campgrounds attract primarily rural and small city and town residents who use the FRAs for weekend camping trips or stopovers. In 1994 over 42 500 individuals camped at the FRAs (McFarlane et al. 1996), and most live in close proximity to the forest. This suggests that FRA campers may represent a prominent stakeholder group whose opinions will be important in future management or development efforts in the RCF.

Table 4. Characteristics of forest recreation areas campers and the Alberta population

Socioeconomic variables	Forest recreation area campers	Alberta population
Metropolitan residents (%) ^a	37.4	52.2
Mean number of persons per household	3.1	2.7
≥45 years of age (%)	33.7	36.4 ^b
University-educated (%)	32.2	33.5 ^b
Total household income ≥\$50,000	47.8	43.8

^a Residents of Edmonton or Calgary.

^b Frequency of individuals 18 years and older (Statistics Canada 1991).

In recent years, government budgets have been shrinking and the financial resources required to operate FRAs have diminished. Forest managers are seeking new strategies to ensure that recreational opportunities are sustained in public forest land. As part of its long-term management strategy, therefore, Alberta Environmental Protection is encouraging industry participation in recreation and FRA management in an attempt to sustain recreation opportunities for the public. To varying degrees, throughout the province, forest management agreement (FMA) holders recognize recreation as an important component in their forest management plans (Kerry Edwards, Alberta Parks Services, Management Support Division, personal communication, July, 1995).

A challenge facing industry in managing FRAs is convincing campers that industry can maintain the quality of service provided by the provincial government. The survey results suggest that the majority of FRA users are not in favour of increased development or privatization efforts at FRA campgrounds in the RCF. Our study determined that FRA users are familiar with facilities and services provided at more-developed campgrounds such as those found at national and provincial parks because many of them visit these areas. It seems that FRA users would judge similar development as inappropriate to FRAs and view FRAs as providing a unique camping opportunity not available at these other types of campgrounds. Comments provided by respondents during interviews and in the mail survey suggest that many perceive that privatization would result in increased development at FRAs. Many

campers thought that increased development would be necessary for the private sector to maximize profits. In order to be successful at FRA management, industry must be sensitive to these concerns. Considering FRA management to be one part of overall forest management, and not a profit-maximizing venture, could be one means for industry to gain public support for its campground management, and thus more-favorable exposure to other aspects of industrial forest use.

One response to development or management changes at FRAs might be increases in random camping in the RCF area. Our results show that many FRA users also random camp, and thus might not be averse to increasing their participation in this activity as a substitute for FRA camping. Increases in random camping will likely create forest management problems, including increased risks of wildfire from campfires and environmental impacts such as garbage and improper sewage disposal. These problems could be exacerbated if FRA campgrounds are developed and current users are displaced to random camping areas.

Recreation management within FMA areas can provide industry with a variety of benefits. FRA operation provides opportunities for direct contact with the camping public. Since one-half of the FRA users also random camp, this might be a way for industry to communicate its concern over the dangers of wildfire from uncontrolled campfires. For example, Weldwood of Canada Limited, Hinton Division, has recently taken over the operation of two FRAs and one day-use area within their FMA. Through these operations, Weldwood wants to communicate to forest users its fire-safety management goals (Maggie Ellen, Weldwood of Canada Limited, personal communication, July, 1995). The use of interpretive trails to inform the public about biophysical characteristics and industrial operations within the area is an excellent public-relations opportunity for forest management companies.

Industry involvement in sustaining recreational opportunities on public land need not be

expensive if these survey results can be generalized throughout the province. Improved campground management could be achieved through some fairly inexpensive service items rather than large facility developments, commercial food outlets, and capital investments. For example, the identification and development of historic sites, small investments in building and maintaining interpretive trails, and the provision of maps of the area showing nearby fishing areas and the locations, length and level of difficulty of hiking, biking and off-highway vehicle trails, would enhance recreational experiences for campers. Direct contact with forest recreationists can lead to a better understanding between forest management companies and at least one significant group of forest stakeholders.

ACKNOWLEDGMENTS

The research assistance of Ramona Maraj and Bonnie Rush is greatly appreciated. We thank Kerry Edwards, Alberta Parks Services and Dave Coish, Alberta Land and Forest Service, for assistance with many aspects of the project. Funding for the study

was provided by the Canada-Alberta Partnership Agreement in Forestry.

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July 1996*

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Cat. No. Fo29-2/62-1996E
ISBN 0-662-24847-3
ISSN 0714-1181

