CROOKED RIVER FISHERIES AND VILDLIFE

The Crooked River with its variety of riparian habitat is essentially a headwaters system originating in Summit Lake on the Arctic Divide, As such it lacks many of the moderating and more productive features of other meandering river systems. Features such as rich nutrient loads carried by other rivers of greater length, more moderate climaate or valleys at lower elevations and different aspect with relation to prevailing weather systems are benefits lacking in the Crooked River system. When compared to other local river systems the Crocked River is indeed a productive fish stream for an arctic drainage watershed, but it is a poor sports fishery due to the abundance of coarse fish thriving in its waters.

FISHERIES

The Crooked River is relatively slow moving as it loses relatively little elevation between Summit Lake and McLeod Lake, some sixty-two cance miles to the North. It is a shallow stream with wide pool areas some of which are actually lakes, such as Davie, Redrocky and Kerry Lake. Aquatic vegetation is very abundant and the poor drainage creates many swamps and marshes that serve as solar heat traps to encourage productivity. Many springs also contribute to the river, the largest is called Livingstone Springs.

A variety of fish species are found in the system and the many habitats available allow them to coexist without demination by any one species. Three species of sucker and squawfish are perhaps the most successful and adaptable species in the Crooked River system. Chub and Whitefish (Rocky Mountain) are also common. Sculpins and red side shiners are found throughout the system. Rainbow trout and Dolly Varden while not common are the major sports fish sought by the river angler.

Fisheries authorities indicate rainbow to one pound and Dollies to five pounds are as large as these species grow in these waters. The sizes of rainbow most commonly caught by fly-fishing and spin-casting anglers are in the eight to ten inch range.

The lakes of the system contain burbot, lake char and lake whitefish as well as the previously mentioned species. These species prefer the deep waters of the lake depressions to the river shallows.

Within the river, coarse fish predominate to the detriment of a sports fishery. Fisheries management investigations have shown that the Crooked River system is virtually a write-off for enhancement potential. The policy of the fisheries staff will be to direct their efforts elsewhere with regard to enhancement. It is expected that the present fishery will retain itself indefinitely under present use by anglers but increased pressure will harm the sportsfish population in the future.

MILDLIFE

Observations of wildlife along the Crooked River have been extensive but few have been recorded as reference material. The Provincial Parks personnel have compiled a bird list for Crooked River Park that includes a twenty five mile radius of the Park. That list is as follows:

COMMON LOON
RED-NECKED GREBE
COMMON GOLDENEYE
BUFFLEHEAD
RED-BREASTED MERGANSER
BARROWS GOLDENEYE
BLACK TERN
BONAPARTES BULL
MEW GULL
WHITE-WINGED SCOTER
LESSER SCAUP
MARSH HAWK

CANADA GOOSE
MALLARD
BLUE-WINGED TEAL
CANVASBACK
RING-NECKED DUCK
GREAT BLUE HERON
AMERICAN BITTERN
SOLITARY SANDPIPER
SPOTTED SANDPIPER
COMMON SNIPE
LESSER YELLOWLEGS
SHORT - EARED OWL

RED-TAILED HAWK BALD EAGLE OSPREY MERLIN KESTRAL SHARP-SHINNED HAWK COMMON NIGHTHAWK RUFUS HUMMINGBIRD BELTED KINGFISHER STELLARS JAY GREY JAY RAVEN COMMON CROW LEAST FLYCATCHER WESTERN FLYCATCHER OLIVE-SIDED FLYCATCHER WESTERN WOOD PEEWEE BARN SWALLOW CLIFF SWALLOW VIOLET GREEN SWALLOW TREE SWALLOW BANK SWALLOW ROUGH-WINGED SWALLOW ROBIN VARIED THRUSH HERMIT THRUSH SWAINSONS THRUSH VEERY WOOD THRUSH ORANGE-CROWNED WARBLER MAGNOLIA WARBLER YELLOW-RUMPED WARBLER TOWNSEND'S WARBLER BLACKPOLL WARBLER McGILLVERY'S WARBLER YELLOW WARBLER WILSON'S WARBLER LINCOLN'S SPARROW WHITE-CROWNED SPARROW SONG SPARROW

CHIPPING SPARROW

BARRED OWL GREAT HORNED OWL SPRUCE GROUSE RUFFED GROUSE SHARP-TAILED GROUSE FLICKER PILEATED WOODPECKER HAIRY WOODPECKER DOWNY WOODPECKER NORTHERN 3-TOED WOODPECKER RED-BREASTED SAPSUCKER ROCK DOVE MOURNING DOVE BLACK-BILLED MAGPIE RUSTY BLACKBIRD RED-WINGED BLACKBIRD BREWERS BLACKBIRD BROWN-HEADED COWBIRD STARLING BLACK-CAPPED CHICKADEE RED-BREASTED NUTHATCH MOUNTAIN BLUEBIRD CEDAR WAXWING

RUBY-CROWNED KINGLET GOLDEN-CROWNED KINGLET AMERICAN REDSTART WESTERN TANAGER EVENING GROSBEAK PURPLE FINCH WHITE-WINGED CROSSBILL RED CROSSBILL PINE GROSBEAK NORTHERN WATERTHRUSH YELLOWTHROAT PINE SISKIN JUNCO MOUNTAIN CHICKADEE RED-EYED VIREO WARBLING VIREO

The 105 species listed for Crooked River Park are obviously incomplete since the valley represents a north-south flyway over a low part of the Arctic Divide. During an early July canoe trip in heavy rain the following birds were observed: VARIED THRUSH, COMMON MERGANSER, CANVASBACK DUCK, BLUE-WINGED TEAL (7 immature), MALLARD,

GOLDENEYE, HERRING GULL, RED-TAILED HAWK, KESTRAL, BALD EAGLE, GOLDEN
EAGLE, OSPREY, KINGFISHER, DIPPER, GREY JAY, STELLARS JAY, RAVEN, RUFUS
HUMMINGBIRD, BARN SWALLOW, TREE SWALLOW, ROBIN, HERMIT THRUSH, SPOTTED
SANDPIPER, FLICKER, HAIRY WOODPECKER, NORTHERN THREE-TOED WOODPECKER,
YELLOW BELLIED SAPSUCKER, RED-WINGED BLACKBIRD, RUSTY BLACKBIRD,
AMERICAN REDSTART, YELLOW-RUMPED WARBLER, BOHEMIAN WAXWING, YELLOW
WARBLER, TREESPARROW, SONG SPARROW, WHITE-CROWNED SPARROW, RUBY-CROWNED
KINGLET, WESTERN WOOD PEEVEE, JUNCO, NORTHERN WATERTHRUSH, WESTERN TANAGER
AND BLACKPOLL WARBLER.

During a helicopter survey on January 19th a total of seventyone Trumpeter Swans were recorded on the Crooked River of which seventeen
were cygnets (young of the year). Bufflehead, Goldeneye and mallard
were also observed as were Dippers and Grey Jays. Stellars Jays were
seen at Summit Lake and Common Redpolls and White-Winged Crossbills
were gravelling up on the highway at Bear Lake.

The riparian habitat along the Crocked River and the lake shores contains excellant bird habitat and thus offers the quiet water traveller a wonderful opportunity for bird watching.

Reptiles and amphibians were not observed during our cance trip. Park records include the Common Garter Snake and amphibians such as the Northwestern Toad, Wood Frog and Spotted Frog.

Mammals reported in Crooked River Park are Mink, Mule Deer, Moose, Wandering Shrew, Meadow Vole, Red-Back Vole, Jumping Mouse, Deermouse, Flying Squirrel, Red Squirrel, Snowshoe Hare, Black Bear, Grizzly Bear, Lynx, Coyote, Red Fox, Wolf, Northwestern Chipmunk, Weasel, Woodchuck, Otter, Fisher, Marten, Beaver and Muskrat. During our cance trip only a muskrat was observed swimming along the river shoreline.

The winter helicopter survey recorded eighteen bull moose, thirty-two cow moose and fourteen calves wintering along the Crooked River. Tracks of three wolves were also observed.

Again on February 16th 1983 a helicopter survey from Davie
Lake to McLeod Lake observed 53 swans (including 2 cygnets), a bald
eagle, goldeneye, buffelhead and mallards. The river reach from Davie
Lake to Redrocky Lake is a winter moose concentration area with 48 and
32 moose counted on the two winter flights. The two flight totals
are not additive as some of the same birds and animals would be recounted.
Extensive areas of riparian habitat and old burn areas exist from Kerry
Lake to McLeod Lake but very little moose utilization was recorded this
winter. It may be used in heavy snow years but it is more likely that
the aspen on the burn has outgrown its usefulness to moose in winter.

Wildlife habitat varies along the river length from Summit
Lake to McLeod Lake. Waterfowl habitat is concentrated in the marshy
open areas where the river meanders and spreads into the brushy margins
where small sloughs or pothole lakes are found. Passerine birds favour
the thick willow and alder thickets in the same areas. Insect—eating
birds utilize the air above the river as their feeding areas.

In the winter, open water areas supply trumpeter swans with both food and protection as they feed on the aquatic plants available on the stream bottom. Springs help to keep stretches of the river open. Other diving ducks and water ouzels also take advantage of the open water in winter. The river from La Pas road bridge downstream to Davie Lake offered the best habitat for swans in January 1983. Ducks and Canada Geese use the islands and wet areas to nest and rear their

young in the spring and summer.

Moose utilize the river edges in winter as an accessable food source. The river ice also forms a travel route for the moose, as they feed on the willows of the shoreline. In the spring, usually Mid-May to Mid-June, cow moose use the wet areas along the stream as a buffer to protect against predators when they give birth to their young. Mineral licks attractive to moose exist at Livingstone Springs, and elsewhere along the river.

The beaver cuttings and other sign was extensive along the river and it is obvious that a substantial population exists along the Crooked River. Muskrat habitat in marshes and wide areas of the river likely support a viable population as well.

Enhancement of the wildlife habitats would best be served by protecting the areas adjacent to the river environs from logging or other forms of disruption such as land clearing or road building. The mosaic or mix of habitats along the Crooked River is best maintained as it is in perpetuity for the benefit of the species currently dependent upon it.

Reference - Flora and Fauna Report - Crooked River by B. Herrin; 1969 updated by B. Schnider, 1974

Crooked River Park - Report on Interpretation 1979 64 pp. by E. van Ingen

flora and fauna reports

- completed to January 1973, April 1974, April 1975, please replace all pamphlets after use

In order to ensure that Flora and Fauna Reports are kept up-to-date, please report any additions on a separate, single page in the Annual Report of the park. Details of the sightings/location and name of the observer(s) must be included.

CROOKED RIVER

Past reports have been deficient in:

- 1. Annotated list of plants and all animals including status (common, rare, local), sightings, behavioral observations, eating habits.
- Geology of area.
- 3. General description of area and park, including any unique features of natural history interest.
- 4. History of area.

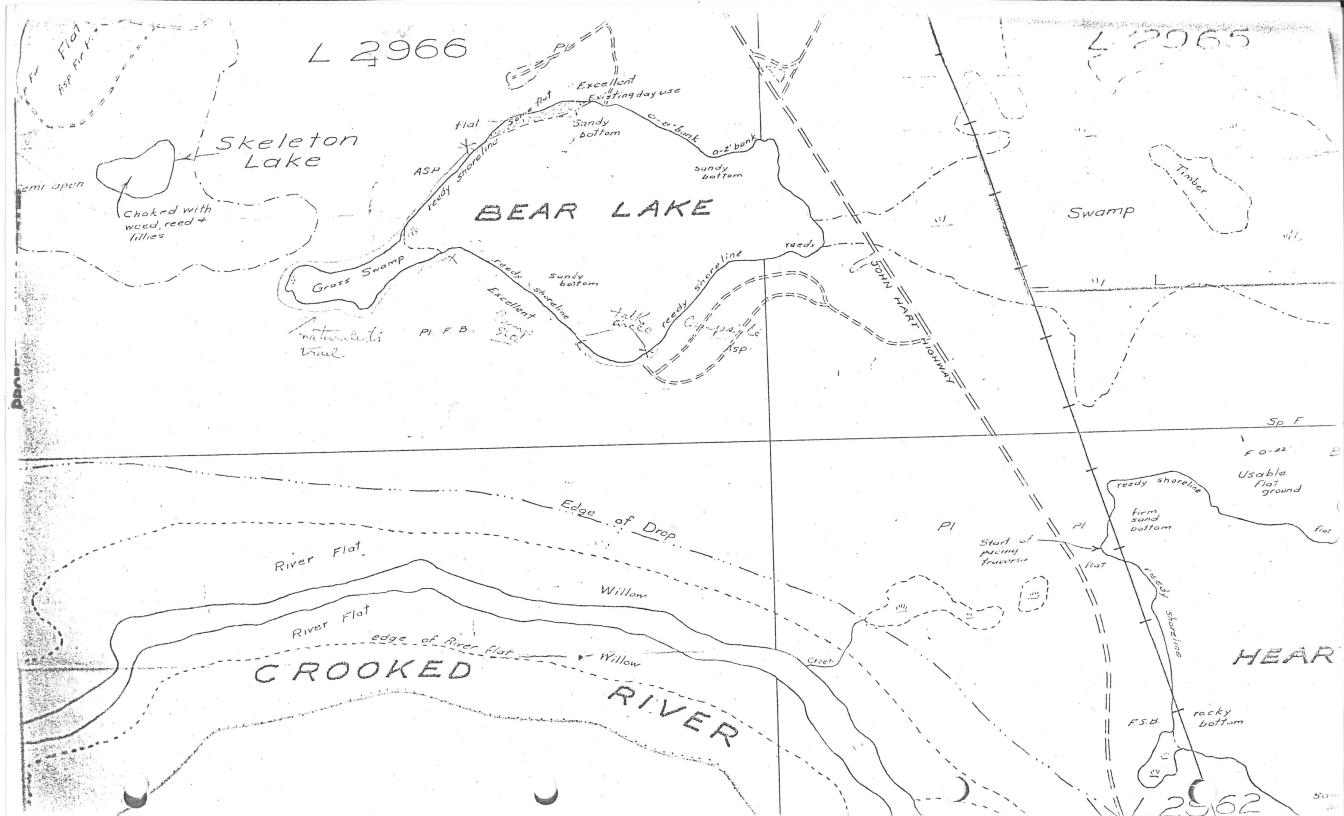
CROOKED RIVER PROVINCIAL PARK

Established 1965 Class A Park Acreage 2,512

P.U.P. - Stores, cabin sites, no logging, no mining. No hunting.

CROOKED RIVER PARK

Commencing at the southwest comer of Lot 2963, Cariboo District; thence easterly along the southenty boundary of said Lot 2963 35 chains; thence due north to a point 15 chains north of the northerly boundary of said Lot 2963; thence due west 88 chains more or less to the westerly limit of the British Columbia Railway right-of-way; thence northerly along the said wasterly right-of-way limit to its intersection with the northerly boundary of Lot 2965, Cariboo District, thence westerly along the northerly boundaries of said Lot 2965, Lot 2966 and Lot 2967 to the natural boundary of the Crooked River on the right bank thereof; thence in a general southerly direction along the natural boundary of the said Crooked River to its most southerly intersection with the westerly boundary of the aforesaid Lot 2967; thence southerly along the westerly boundary of said Lot 2967 to a point 10 chains porth of the southwest corner of said Lot 2967; thence due esst 80 chains moss or less to the easterly boundary of said Lot 2967; thence southerly along the easterly boundaries of Lots 2967 and 2960 to a point 10 chains south of the natural boundary of the afcresaid Crooked River on the left bank thereof; thence in a general easterly direction 10 chains perpendicularly distant and parallel to the said left bank of the Crooked River to the southerly boundary of Lot 2962; thence easterly along the said southerly boundary of Lot 2962 to the southwest comer of Lot 2963 being the point of commencement: save and except thereout the rights-of-way of Provincial Highway No. 97, the British Columbia Railway, the Westcoast Transmission Company Limited Pipeline and the Western Pacific Products and Crude Oil Pipelines Ltd. Pipeline and containing 2,511 acres more or less.



Interpretive Notes of Crooked River Park

from the Report of Brian Herrin, 1969.

Lichen and fungi flora were particularly diverse in late August.

Leaf miners were active as well as fungi-eating larvae of insects.

Shore birds congregated to feast on emerging toads.

Reports of bats, not included on mammal list - species should be identified in 1974.

NOTES ON THE INTERPRETATIVE POTENTIAL OF CROCKED RIVER PROVINCIAL PARK

This park lacks spectacular natural features and the flora and fauna is rather impoverished. There is a sameness about the park. It is, however, different geologically and bot-anoially from the surrounding area. The main physical features are the lakes and hills of fine sand. Much of the park supports a park-like cover of Lodgepole Pine. Ground cover is composed of a carpet of mosses and lichens particularly Cladonia. Herbaceous plants are few here. Only Kinnikinnick; Blueberry, Vaccinium Canadense, and Pipsissewa were seen. Areas where more humus has accumulated have a much more varied plant cover. Here grows Wite Spruce, Aspen, White Birch, and a variety of flowering plants. Water bodies have scouring rush, sedges and horsetails around the margins, and water-lilies in the shallows. Plants have been removed from the beach areas of Bear Lake.

Plants: -Black Spruce,

- -White Spruce,
- -Lodgepole Pine,
- -Aspen,
- -Black Cottonwood,
- -Mountain Alder.
- -White Birch,
- -Willow (spp.),
- -Douglas Fir (only one tree seen),
- -Canada Blueberry,
- -Kinnikinnick,
- -Saskatoon.
- -Pipsissewa,
- -Flat-top Spirea,

- -Thimbleberry,
- -Wild Rose.
- -Spreading Dogbane,
- -Soopolalie,
- -Hardhack.
- -Bunchberry.
- -Water Lily,
- -Pearly Everlasting,
- -Waxberry.
- -Fireweed,
- -Horsetail, (sp.)
- Pyrola, (sp.)
- -Sedges, (spp.)
- -Scouring Rush

Mosses and lichens are a noticeable botanical feature of the park. Three most abundant species are:

- 1. Cladonia raugiferina on the ground,
- 2. Usnea vulpina (black) on Lodgepole Pine, and
- 3. Usnea (gray) on Spruce.

Clubmosses are particularly abundant. Three species which were seen are:

- 1. Stiff Clubmoss -- Lycopodium annatinum,
- 2. Ground-cedar -- Lycopodium complanatum, and
- 3. Ground-pine -- Lycopodium obscurum.

Mammals

Beaver cuttings at Squaw Lake. D. Stirling, October 28, 1968.

Some Flora of Crooked River Park

WESTERN YEW THIMBLEBERRY DOUGLAS FIR AMABILIS FIR LODGEPOLE PINE BLACK SPRUCE WHITE SPRUCE COMMON JUNIPER TREMBLING ASPEN WHITE BIRCH BLACK COTTONWOOD MOUNTAIN ALDER SITKA ALDER MOUNTAIN ASH WILLOW TWAYBLADE . CORAL ROOT (SPOTTED) CORAL ROOT BIG-LEAVED REIN ORCHID RATTLESNAKE PLANTAIN SWAMP GOOSEBERRY SOOPOLLALIE SQUASHBERRY BUNCHBERRY WILD ROSE SASKATOON BERRY BITTER CHERRY VELVET LEAVED BLUEBERRY KINIKINNIK SPREADING DOGBANE BASTARD TOAD-FLAX SILVERWEED FIREWEED FOAM FLOWER COLT'S FOOT TWISTED STALK BLACK TWINBERRY YARROW CLOVER TWINFLOWER ASTER INDIAN PAINT BRUSH FALSE SOLOMON'S SEAL SARSAPARILLA VIOLA PRINCES PINE PYROLA ONE SIDED PYROLA QUEEN CUP

WATER ARUM

Taxus brevifolia Rubus parviflorus Pseudotsuga mensiesii Abies amabilis Pinus contorta Picea mariana P. glauca Juniperus communis Populus tremuloides Betula papyrifera Populus trichocarpa Alnus tenuifolia A. sinuata Sorbus sitchensis Salix spp. Listera sp. Coralorhizza maculata C. trifida Habenaria orbiculata Goodyera oblongifolia Ribes lacustre Shepherdia canadensis Viburnum pauciflorum Cornus canadensis Rosa sp. Amelanchier alnifolia Prunus emarginata Vaccinium myrtilloides Arctostaphylos uva-ursi Apocynum androsaemifolium Commandra livida Potentilla sp. (in marshes) Epilobium angustifolium Tiarella unifoliata, Petasites sp Streptopus amplexifolius Lonicera involucrata Achillea millefolium Trifolium spp. Linnaea borealis Aster sp. Castilleja sp. Smilacina racemosa Aralia nudicaulis Viola sp. (white) Chimaphila sp. Pyrola virens P. secunda Clintonia uniflora Calla palustris

BUCKBEAN YELLOW POND LILY NORTHERN BEDSTRAW HARDHACK FLAT TOP SPIREA BLADDERWORT YELLOW PEA LABRADOR TEA COTTON GRASS SMALL MISTLETCE . PUSSYTOES DANDELION SLENDER HAWKWEED WHITE HAWKWEED BROAD LEAVED ARNICA LYCOPODIUM

EQUISETUM

OREGON GRAPE

- above listed June 1-/15, 1969.

Menyanthes trifoliata Nuphar polysepala Galium boreals Spirea douglassii S. lucida Utricularia vulgaris Lathyrus ochroleucus Ledum groenlandicum Eriophorum sp. Arceuthobium americanum Antennaria sp. Taraxacum officinalis Hieracium gracile H. albiflorum Arnica latifolia L. obscurum L. annotinum L. complanatum Equisetum sulvaticum E. arvense Mahonia spp.

1973 additions - (Schnider)

CALYPSO
COLUMBINE
INDIAN HELLEBORE
ROCK HARLEQUIN
WESTERN BUTTERCUP
PEARLY EVERLASTING
DEVIL'S CLUB
STINGING NETTLE

Calypso bulbosa
Aquilegia formosa
Veratrum eschocholtzii
Corydallus sempervirens
Ranunculus occidentalis
Anaphalis margaritacea
Oplopanax horridus
Urtica lyalli

The campground area supports a rich undergrowth of bunchberry, queen's cup, saskatoon, vaccinium, solomon seal, soopolallie, and archids. White spruce intermingled with alpine fir and lodgepole pines. (Schnider, 1973).

CROOKED RIVER PARK

SOME REPTILES

Striped garter snake

SOME AMPHIBIANS

Northwestern Toad Yellow Tree Toad

BEARS

Black Bear Grizzly Bear

CATS

Lynx

CANINES

Coyote Red Fox Wolf

CHIPMUNKS AND SQUIRRELS

Northwestern Chipmunk Red Squirrel

MUSK CARRIERS

Canadian River Otter

DEER AND GOATS

Moose (Osporn) Caribou

LARGER RODENTS

Beaver Muskrat

MICE AND RATS

Deer Mouse

Common Loon* Red-necked Grebe* Canada Goose* Mallard* Blue-winged Teal Canvasback Ring-necked Duck* Common Goldengye* Bufflehead* Red-breasted Merganser Marsh Hawk Red-tailed Hawk Bald Eagle* Osprey* Pigeon Hawk* Spruce Grouse Ruffed Grouse* Sharp-tailed Grouse Great Blue Heron American Bittern* Solitary Sandpiper* Spotted Sandpiper* Common Snipe* Bonspartes Gull* Short-eared Owl Barred Owl * Great Horned Owl Common Nighthawk* Rufous Hummingbird* Belted Kingfisher* Yellow Shafted Flicker* Red Shafted Flicker* Pileated Woodpecker* · Red-breasted Sapsucker* Hairy Woodpecker* Downy Woodpecker* N. Three-toed Woodpecker Picoides tridactylus Least Flycatcher* Western Flycatcher* Western Wood Pewee* Olive-sided Flycatcher Barn Swallow* Cliff Swallow Viblet-green Swallows Tree Swallows Bank Swallow* Rough-winged Swallow* Steller's Jay Gray Jay*

Gavia immer Podicebs grisegena Branta canadensis Anas platyrhynchos Anas discors Aythya valisineria Aythya collaris Bucephala clangula Bucephala albeola Mergus serrator ĉircus cyaneus Buteo jamaicensis Haliaeetus leucocephalus Pandia haliaetus Falco sparverius Canachites canadensis Bonasa umbellus Pediocetes phasianellus

Botaurus lenticinosus Tringa solitaria Actitis macularia Capella gallinago Larus philadelphia Asio flammeus Strix veria Bubo virginianus hordeiles minor Selasphorus rufus Megaceryle alcyon Colaptes auratus Colaptes cafer Dryocopus pileatus Sphyrapicus varius Dendrocopos villosus Dendrocopos pubescens Empidonax minimus Empidonax difficilis Contopus sordidulus Nuttallornis borealis Hirundo rustica Petrochelion pyrrhonota Tachycineta thalassira iridoprocas bicolor Riparia riparia Stelgidonteryx rufficollis Cyanocitta stelleri Perisoreus canadensis

Common Ravenw Common Crow* Black-capped Chickedee* D: mer Red-breasted Nuthatch* Robin* Varied Thrush Hermit Thrush* Swainsons Thrush* Veery* Mountain Bluebird Ruby-crowned Kinglet* Cedar Waxwing Starling Red-eyed Vireo* Warbling Virso* Urange-crowned warbler Magnolia Warbler Audubon's Warbler* Townsends Warbler* Blackpoll Warbler Northern Waterthrush Yellowthroat* Macgillavrays Warbler American Redstart* Brewers Blackbird* Brown-headed Cowbird* Western Tanager* Evening Grosbeak* Purple d'inch White-winged Crossbill rine Siskin* Oregon Junco* Chioning Sparrow*

Song Sparrow*

Corvus corax Corvus brachyrhynchos rarus atricapillus Cinchus mexicanus Sitth canadensis Turdus migratorius Ixoreus naevius Hylocichla guttata Hylocichla ustulota Hylocichla fuscescens Pinle currucoides Regulus celendula Bombycilla cedrorum Sturnus vulgaris Vireo olivaceous Vireo gilvus Vermivora celata Dendroica magnolia Dendroica auduboni Dendraica townsendii Dendroica striata Seiurus nomeboracensis Geothlypis thich as uporornis tolmiei Setophaga ruticilla Euphagus cyanocephalus Molothrus ater Piranga ludoviciana Hesperiphona vespertina Carpodacus pupureus

Spinus pinus Junco oreganous Spizella passe ina Melospiza melodia

Pirds were recorded on a twenty-five mile radius of the park. Those marked with ancasterix were redorded within the park. Local people reported swans that wintered along the Crooked River but there was no records during the summer.

Bird life is not exactly plentiful, but there are a fair number of species in the campground. The campers favorites are Western tanager and Red-necked grebe.

(Schnider, 1973.)

CHOOKED RIVER

Temporary Addin.

New birds - 1974 (records marked * are inside the park.

*Lesser Yellowlegs

*Rusty Blackbird

*Red-wing Blackbird

*Sparrow Hawk

Barrow's Goldeneye

*Golden Crowned Kinglet

*White-crowned Sparrow

Black billed Magpie

*Wilson's Warbler

*Mountain Chickadee

*White Winged Scoter

Black Tern

Lincolns Sparrow

Pine Grosbeak

*Mourning Dove

New Mammals

Mink - 1 record Mule Deer - 1 record Wandering Shrew - 2 records Flying Squirre1 - 2 records

Bob Schnider. 1974. Temporary Addin.

New Plants

Ox-eye Daisy
Yellow Monkey Flower
White pea-vine
Vetchling
Blue-eyed grass
Fox tail
Cat tail
Cinquifoil sp.
Canada Thistle
Pineapple Weed
Canada Mint
Red Oscir Dogwood
Goldenrod
Spurred Gentian

Leucanthemum vulgare
Mimulus gutlatus
Lathyrus sp.
Lathyrus sp.
Sisyrinchium angustifolium

Typha Latifolia

Cirsium arvense Matricaria matricourioides

Cornus stolonifera Solidage nemoralis Halenia deflexa

Black Bear

The Black Bear is our commonest large mammal. They frequent the local dump and the campsite. These two areas are connected by a well travelled Bear path. In the campsite the bears become extremely bold. They do not scare easily. In 1973, one large male broke into a trailer. He was eventually removed and shot. Several attempts to trap the bear had been made previously. The same bear had attempted to charge the camp cook but was driven off by a wooden spoon across the snout.

A female was observed at the dump with three (3) cubs in 1973. This year another female was observed in the same area with three (3) cubs. It is unknown whether this is the same individual.

Every effort should be made to instruct the campers in proper food storage and waste elimination to prevent bear problems.

Grizzly Bear

While fairly common in the area, this bear is not seen often. A grizzly female and cub were recorded at the rock pit near Whiskers Point in late June. Several reports of grizzly came from Teapot and Coffeepot Mountains and grizzlies were observed at Arctic Lake and Merton Tower in 1973.

Two local youths reported a grizzly at the Bear Lake dump on June 23, but this report has not been authenticated.

Later checks revealed this "grizzly" at Bear Lake dump to be a very large cinnamon black bear.

Lynx

A lynx was recorded in early July, 1973 near LePas bridge. Lynx was recorded again in 1974 about two miles from this bridge. Though not seen often in summer, local residents claim there are "lots" around.

Coyote

Seen occasionally near highways in late evening. Never in numbers. Heard often at night from campsite. Very small animals, probably to a maximum of 25 lbs. Feeding habits unknown.

Red Fox

Recorded on Le Pas road at Mile 4 in 1973 and 1974. Perhaps there is a den in this area. Recorded in early morning and early afternoon, never in evenings.

Wolf

Seen only once in 1973 but tracks often found at Forestry Campsite on Dominion Lake. One hide from road kill was observed as well. Youth Crew foreman reports (confirmed by observations) that nearly all wolves here are very dark, some almost totally black, and keep this coloring all year.

Northwestern Chipmunk

Uncommon in the park area. Seen more often at Crystal Lake. Two records for Dominion Lake.

Red Squirrel

Common throughout the park and surrounding area. In spite of this, few signs of their presence are observed, i.e. squirrel's table, storehouse etc. Quite tame, often stealing food in campsite. One individual is a frequent visitor to the cookhouse pantry.

Canadian River Otter

Seen occasionally in Crooked River. One observed catching a white-fish under Le Pas bridge.

Moose

More common than sightings would lead one to expect. Several residents in or near slough two miles north of Summit Lake on Hart Highway. Three recorded in campsite in early June, 1974.

Moose (con't.)

Local residents have been known to ride moose while swimming. They claim that the moose are easily steered by pulling their ears.

Trail around Bear Lake shows signs of winter brousing and is scattered with moose turds (also known as "smartening-up-pills" or poo!!).

Moose in Crooked River can be called by dumping water from a billy can into the river. Do not attempt this method during the rutting season!!

Cariboo

Herd summers on meadow above road to Church Logging Camp. Observed in 1973, reported in 1974. Estimated to be about 40 in the herd.

Beaver

Very common. All along Crooked River. Also in Squaw Lake, Dominion Lake, and Beaver Pond. Usually seen in evenings between 8:00 p.m. and 8:30 p.m. Mother observed swimming downriver from LePas bridge with one young on her back. Beaver skull found at Ferguson bridge in mid-June. Muskrat

Numerous along Crooked River. Often seen in willows along the edge of the river. One recorded under Le Pas bridge, June 25, 1974.

Deer Mouse

Common, but not often seen. Heard at night in woods and under cabins.

Two road kills examined in 1973, one in 1974. Stomach contents were unrecognizable.

CROOKED RIVER

ADDITIONS TO PARK FLORA & FAUNA: (New sightings MUST be verified by two or more naturalists, detailed field notes or photographs. No others will be accepted. NO LIVING THING WILL BE COLLECTED IN ORDER TO VERIFY REPORTS.

Not enough flora and fauna work was done this year, and keying of plants was found to be difficult and slow without the aid of a microscope. Some errors occur in the present flora list: Amabilis fir (Abies amabilis) does not occur in the park but Alpine fir Abies lasiocarpa does. It is doubtful if western yew, Taxus brevifolia occurs in the park.

Additions to Flora 1975

On ridge above Crooked River: Yellow violet - Viola sp. Buck brush - Ceanothus sanguineus

<u>Squaw Lake</u> Skunk cabbage - Lysichiton kamtschatcense Marsh skullcap - Scutellaria galericulata

Around Bear Lake
Water smartweed - Polygonum amphibium
Marsh (Swamp) cinquefoil - Potentilla palustris
Tall white bog orchid - Habenaria dilatata var. leucostachys
Slender-spire orchid - Habenaria unalascensis
Cow wheat - Melampyrum lineare
Pine drops - Pterospora andromedea
Pinesap - Hypopitys monotropa
Golden corydalis - Corydalis aurea
Drummond's Rock cress - Arabis drummondii

<u>Skeleton Lake</u> <u>Moorwort - Andromeda polifolia</u>

At least 1 more species of Vaccinium is common throughout the park. Pyramid spiraea - Spiraea pyramidata - or is it Spiraea douglasii and Spiraea betulifolia cross breeding?

Liverworts - by Park Headquarters and in ditches along campsite road.

Many plants are found only where topsoil has been brought into the park; e.g. Golden corydalis, Canada Thistle, and Drummond's rockcress. There are many other "weed" type plants found growing only in the topsoiled areas as well. These additions should be regarded as tentative as they have not been verified by another naturalist. The exception is Buck brush seen by David Stirling and Grace Barclay June 18, 1975.

Additions to Bird List

(Birds recorded on 25 mile radius; those marked * recorded within park)

Lesser Scaup*
Sharp—shinned hawk

Mew gull*

Rock dove*

Yellow warbler

Red crossbills*

These additions should be regarded as tentative as they have not been verified by another naturalist, except the Mew Gull seen Aug. 16, 1975 by Glen Ryder and Grace Barclay.

Change -

Pacific Loon Holboell's Grebe

Fulmar

Pale-footed Shearwater Slender-billed Shearwater

Fork-tailed Petrel Leach's Petrel Great White Heron wurdemann's Heron (

Blue Goose European Teal Common Teal Baldpate

American Widgeon

Shoveller Canvas-back

Greater Scaup Duck Lesser Scaup Duck American Golden eye

Buffle-head 01d-squaw American Scoter Common Scoter American Merganser Harlan's Hawk

American Rough-legged Hawk Marsh Hawk or Harrier

Duck Hawk or Peregrine Falcon

Pigeon Hawk or Merlin Sparrow Hawk or Kestrel

Coot

Oyster Catcher Wilson's Snipe Hudsonian Curlew-Greater Yellow-legs Lesser Yellow-legs

Red-backed Sandpiper -

Dowitcher Avocet Herring Gull Kittiwake

Atlantic or Common Murre

Richardson's Owl

Nighthawk Flicker

Yellow-shafted Flicker Red-shafted Flicker

Gilded Flicker

Arctic Three-toed or Black-backed

Woodpecker

American Three-toed Woodpecker Western or Arkansas Kingbird

To

Arctic Loon Red-necked Grebe Northern Fulmar

Flesh-footed Shearwater Short-tailed Shearwater Fork-tailed Storm-Petrel Leach's Storm-Petrel

Great Blue Heron Great Blue Heron

Snow Goose

Green-winged Teal Green-winged Teal American Wigeon American Wigeon Northern Shoveler

Canvasback Greater Scaup Lesser Scaup Common Goldeneye

Bufflehead 01dsquaw Black Scoter Black Scoter Common Merganser Red-tailed Hawk Rough-legged Hawk

Marsh Hawk Peregrine Falcon

Merlin

American Kestrel American Coot Oystercatcher Common Snipe ▶ Whimbrel

Greater Yellowlegs Lesser Yellowlegs

Great Knot Dunlin

Short-billed Dowitcher

American Avocet

Herring & Thayer's Gull Black-legged Kittiwake

Common Murre Boreal Owl

Common Nighthawk Common Flicker Common Flicker Common Flicker Common Flicker

Black-backed Three-toed Woodpecker

Northern Three-toed Woodpecker Western Kingbird