

FISH AND WILDLIFE

RESOURCE DESCRIPTION

The Matanuska Valley Moose Range supports a variety and abundance of fish and wildlife (see Map 3, page 23 and Tables 1 and 2, pages 18 and 19). Generally speaking, approximately 134 species of birds (See Checklist of Birds -- Palmer Area by M. T. Bronson), 14 species of fish and 28 species of mammals are inhabitants or migrants in the Moose Range. The diversity and abundance of fish and wildlife reflect the variety and productivity of available habitats that provide food, cover, water and reproductive areas for these species. Moose Range habitats include river floodplains, riparian areas, deciduous, coniferous and mixed forests and woodlands, shrublands, grasslands, forb communities, muskegs, rivers, streams, lakes, wetlands and a variety of tundra plant communities.

Moose, the most abundant large ungulate (hoofed) species found within the Moose Range, are year-round residents. The highest moose densities occur where habitat disturbance resulting from landslides, forest fires, clearing, flooding or timber cutting has created paper birch, willow and aspen vegetation in an early seral growth stage. Disturbed vegetative habitats produce larger volumes of palatable moose forage, which in turn result in greater seasonal growth and better physical condition of moose. Eventually the area will support a much larger moose population as a result of the habitat enhancement program.

In a 1981 ADF&G (post-hunting season) aerial survey, 508 moose were seen in portions of the Moose Range. Based on this information and other moose density estimates from Susitna basin studies, the Moose Range moose population is estimated to be less than 1,000 moose. The 1986 aerial survey projects the moose population to be between 426 and 986. ADF&G used the 1986 aerial survey data to determine the preliminary high density moose wintering areas shown on Map 3, page 23.

There is a general distribution of brown and black bear throughout the area, with high brown and black bear occurrences in the eastern third of the Range, some brown bear occurrences in upper drainages and some black bear occurrences in the southcentral section of the Range. The Range supports a general distribution of Dall sheep, with a known important lambing area on Puddingstone Hill. Wolves are known to be in the middle and upper reaches of some drainages.

Other wildlife species which inhabit the Moose Range include wolverine, mountain goat, caribou, coyote, land otter, fox, marten, beaver, mink, weasel, lynx, hare, red squirrel, porcupine, three species of ptarmigan and spruce grouse. See Table 1, page 18, for the wildlife inventory. In addition, several important raptors such as the peregrine falcon, gyrfalcon, and bald and golden eagle nest, hunt and/or migrate through the area. Peregrine falcons and bald eagles are protected under existing Federal Laws, which apply within the Moose Range.

FISH AND WILDLIFE

Migrant and resident fish found within the Moose Range include chinook, coho, and chum salmon, rainbow trout, Dolly Varden, arctic grayling, round whitefish, burbot, three-spine stickleback, nine-spine stickleback, and the longnose sucker. The important sport fishing species include chinook, coho and chum salmon, rainbow trout, Dolly Varden, and arctic grayling. See Table 2, page 19 for species occurring in specific waters within the Range. More information about fish and wildlife species can be derived through the use of the ADF&G Fish and Wildlife Resources Element for the Susitna Area Planning Study and A Guide to Wildlife Viewing in Alaska in conjunction with Map 4, page 27, on vegetation.

Table 1: WILDLIFE INVENTORY

SPECIES	SURVEYS		HARVEST		EFFORT IN DAYS		# HUNTERS
	Unit 14A	Unit 13	West 14A	East 13	West 14A	East 13	
<u>Moose</u>	706± 280 (1986)	N/A	104-130 Range from surveys 1981 to 1984	12-25 Range from surveys 1981 to 1984	2500-3000 Range from surveys 1981 to 1984	100+ est.	334 * (1981)
<u>Sheep</u>	30 counted in range 20 adjacent	30 counted in range 600 adjacent	N/A	N/A	374 (1981)	262 (1981)	108 (1981)
<u>Goat</u>	1 counted in range 15 adjacent	2 counted in range 15 adjacent	N/A	N/A	N/A	N/A	N/A
<u>Caribou</u>	No surveys. Present, not abundant	30-15 est. (1981)	N/A	9 (1981)	N/A	18 (1981)	9 (1981)
<u>Brown Bear</u>	No Surveys Present, not abundant (No techniques available)		yes N/A	yes N/A	yes N/A	yes N/A	yes N/A
<u>Black Bear</u>	No Surveys Present and common (No techniques available)		yes N/A	yes N/A	yes N/A	yes N/A	yes N/A
<u>Small Game</u>	No Surveys Present and common (No techniques available)		yes N/A	yes N/A	yes N/A	yes N/A	yes N/A
<u>Furbearers</u>	No Surveys Present and common (No techniques available)		yes N/A	yes N/A	yes N/A	yes N/A	yes N/A

N/A = Numbers Not Available

* = Tickets Returned

Compiled by ADF&G 12-85

Table 2: FISH INVENTORY

WATERBODY	ANADROMOUS FISH (Escapment)			RESIDENT FISH			Effort (Angler Days)
	Chinook	Coho	Chums	Dolly Varden	Rainbow	Grayling	
Wasilla Creek	200-300	500-4000	--	P	P	--	4500-6260 est.
Moose Creek	400-600	100	?	P	P	--	500-1000 est.
Eska Creek	?	P	P N/A	P	?	?	500± est.
Granite Creek	P N/A	P N/A	P N/A	P	?	?	?
Boulder Creek	?	?	P N/A	?	P	P	?
Kings River	P N/A	?	P N/A	P	P	?	500± est.
Chickaloon River	?	P N/A	P N/A	P	P	P	?
Slipper Lake	--	--	--	--	P	?	?
Fish Lake	--	--	--	--	P	--	?
Wishbone Lake	--	--	--	--	P	--	?
Seventeen Mile Lake	--	--	--	--	?	P	?
Chain Lakes	--	--	--	--	P	?	?

N/A = Numbers Not Available ? = Presence Undetermined P = Present -- = Not Present

Compiled by ADF&G 12-85 through personal communications with Larry Engel, and ADF&G Regional Guides.

FISH AND WILDLIFE

RESOURCE EVALUATION

The Matanuska Valley Moose Range is readily accessible from the Glenn Highway, spur roads and a number of trails which are found in the vicinity of Moose Creek, Sutton, Jonesville, Kings River, Chickaloon River and Purinton Creek. Because of relatively good access, high moose densities and close proximity to Anchorage and Palmer/Wasilla hunters, the Moose Range is a very popular moose hunting area. An analysis of returned hunter harvest tickets indicates that approximately 334 hunters spent 1,579 user-days to harvest 105 moose from the Moose Range in 1981. Extrapolation of these numbers to account for hunters who did not return their harvest tickets indicates up to 878 hunters spent up to 4153 user-days, harvesting up to 276 moose. This effort occurred from the Moose Creek drainage to Young Creek. Sixty-three percent of the moose hunters were from the Anchorage area, 34% were from the Palmer/Wasilla area, and 3% were from other areas. This illustrates the high demand and importance of this land for providing public hunting opportunities near these population centers.

The economic value associated with moose hunting in the Susitna basin for 1981 includes an estimated net expenditure of \$208,000 by hunters for recreational equipment, lodging, etc., and \$1,034,000 as the replacement protein food value for moose meat (Appendix B, Chapter I, Table 31, Fish & Wildlife Resources Element for the Susitna Area Planning Study, 1984).

Sport fishing for all species, except chinook (king) salmon, is permitted in the Range, and the fish populations support considerable recreational use. ADF&G estimates 500 to 1,000 user-days on Moose Creek in 1982 (see Table 2, page 19). Wasilla Creek, a popular fishing stream, originates in the Moose Range. Estimated user-days on Wasilla Creek are from the portion lying outside of the Moose Range. No sport fishing data are available for Eska Creek, Granite Creek, Boulder Creek, Kings River or the Chickaloon River. However, ADF&G estimates that total sport fishing effort on these creeks, other than Moose Creek, ranges between 500 to 1,000 user-days annually (personal communication with D. Watzjold). Fish harvested are predominantly Dolly Varden, but arctic grayling, whitefish, coho and chum salmon are occasionally caught.

Although some sport fishing for Dolly Varden occurs on each of the above streams within the confines of the Moose Range, a majority of the sport fishing effort occurs just outside of the Moose Range boundary near each stream's confluence with the Matanuska River. Year-round sport fishing for rainbow trout occurs on Seventeen Mile and Wishbone Lakes (personal communication with L. Engel.).

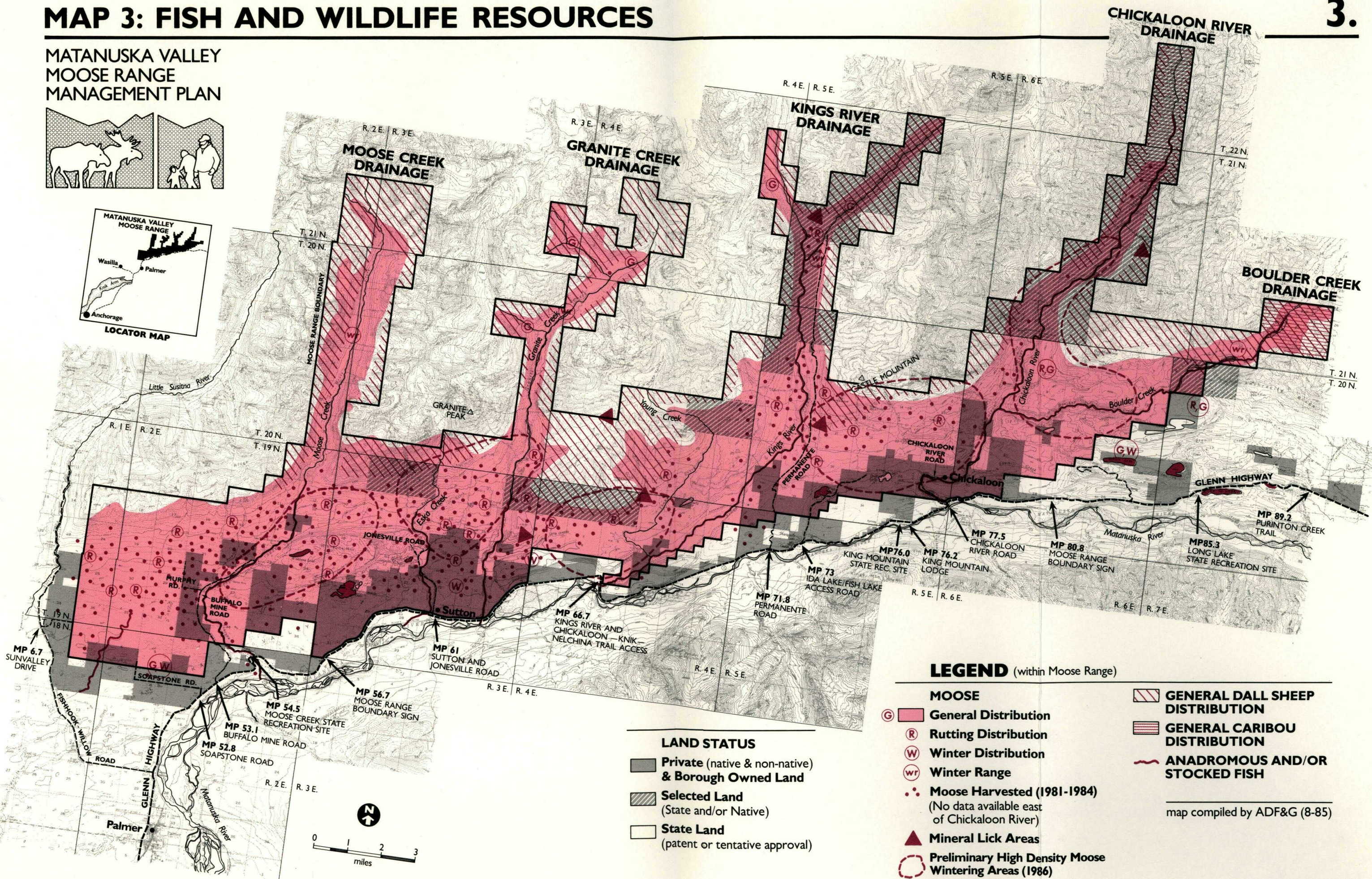
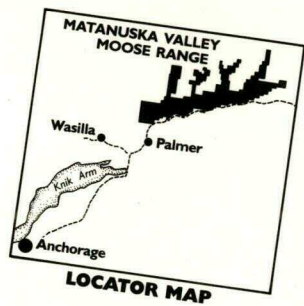
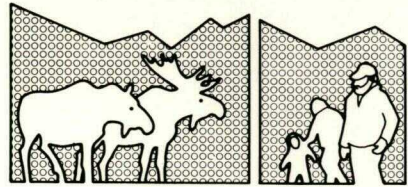
The distance traveled to these streams and lakes, and the number of recreational users represent an important local economic interest and deep rooted public concern for the resource. The economic analysis conducted on the Willow Creek sport fishery in 1980 by ADF&G concluded that the public's "willingness to sell" one pink salmon fishing day amounted to \$140.00. (Appendix A, Fish & Wildlife Resources Element for the Susitna Area Planning

Study, 1984). The Willow Creek Study shows that fishing for chinook or rainbow trout has a higher recreational value than for pink salmon or Dolly Varden. Applying the fishing-day value derived for pink salmon times the number of fishing days annually to all species harvested in the streams originating in the Matanuska Valley Moose Range indicates the following: the value of the anglers' willingness to sell their sport fishing opportunities originating in the Moose Range varies between \$492,000 and \$983,000 annually.

Public use is expected to increase within the Moose Range as the human population increases and access to adjoining private lands is restricted. Whether the use is by hunters, trappers, wildlife viewers, firewood cutters, persons fishing, snowmachiners, and/or hikers, there will be times when certain uses will need to be restricted to protect sensitive habitats for fish and wildlife resources. Within the Moose Range, such habitat includes: moose winter range, moose breeding areas, Dall sheep lambing areas, riparian lake and stream habitats, stream banks and waterfowl nesting areas.

MAP 3: FISH AND WILDLIFE RESOURCES

MATANUSKA VALLEY MOOSE RANGE MANAGEMENT PLAN



LAND STATUS

- Private (native & non-native) & Borough Owned Land
- Selected Land (State and/or Native)
- State Land (patent or tentative approval)

LEGEND (within Moose Range)

- MOOSE** General Distribution
- Rutting Distribution
- Winter Distribution
- Winter Range
- Moose Harvested (1981-1984) (No data available east of Chickaloon River)
- Mineral Lick Areas
- Preliminary High Density Moose Wintering Areas (1986)
- GENERAL DALL SHEEP DISTRIBUTION
- GENERAL CARIBOU DISTRIBUTION
- ANADROMOUS AND/OR STOCKED FISH

map compiled by ADF&G (8-85)

