

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
JUNEAU, ALASKA

A Progress Report On Wildlife

of the

SUSITNA RIVER BASIN

Third Judicial Division

Territory of Alaska

February 1954

For Administrative Use Only

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GENERAL

1. The Susitna River Basin, an area of 19,300 square miles, lies in south-central Alaska, north of the farthest inland projection of Cook Inlet, between latitudes 61° - 64° and longitudes 146° - 153°.

2. During the past few years, this basin has been investigated by the U. S. Bureau of Reclamation as a possible source of hydroelectric power for the towns of Anchorage and Fairbanks and the general railbelt area. Twenty-one potential dam sites have been located although only twelve of these will be subject to more investigation.

3. This progress report deals with preliminary monetary values of the Susitna River Basin. It is comprised primarily of tables for each of the important wildlife species of the basin and short explanations of the derivation of figures for each table. The report is not complete; it is not final. Rather, it is the genesis for future evaluation reports dealing with the Susitna Basin and other drainages of Alaska.

4. The general procedure in arriving at the average harvest and value of species was as follows:

A. Total Alaska harvest or total harvest in Alaska by licensed hunters was obtained.

B. A percentage of this harvest was assigned for the Susitna Basin. In some cases, such a percentage figure was obtained for

several years; in most cases, for only one year. Interpolation was made for other years where more than one year's percentage was available. In case of only a one year percentage being available, that same percentage was used "en toto" for all other years.

C. From these percentage figures, total Susitna harvest by years was computed.

D. Annual values were determined for each species and total annual value of each species was computed.

5. Further explanations are given on the above four points for each group as they are taken up.

6. Biological investigations conducted in the basin during past years have not been included here. Such information may be compiled in the future and will form a separate report.

BIG GAME

7. Big game was found to be the most important wildlife group in the basin with an average annual kill of 742 big game animals for a value of about \$210,000. Moose is the most important big game animal followed by caribou, brown or grizzly bear, and mountain sheep. Black bears, due to low hunting interest, and mountain goats, because of insignificant populations, have not been included in this report.

8. The tables following for big game are generally self-explanatory. However, a question may arise as to how certain figures were derived.

9. In the case of caribou, kill figures for the Nelchina caribou herd were available for several years as a result of checking stations or other work. When kill figures were not available, estimates were made. As a result, an eleven year period of record was used to determine average annual kill. Twenty-five percent of this kill is attributable to the Susitna Drainage, the other 75 percent to the Copper River Drainage. The unit value of \$175.00 is an estimate, based on general economic data gathered during the 1953 hunting season. During the next year, this figure will be more accurately determined.

10. Moose, bear, and sheep kills are premised on a percentage figure based on the 1942 season and are shown in red on the tables. These "known" figures are based on information contained in The

Seventeenth Annual Report of the Executive Officer to the Alaska Game Commission, 1942. In the case of moose and bear, the unit value was taken from the River Basin Manual. The sheep value is based on general economic data of the same nature as caribou and subject to revision by 1955.

11. Inescapably, there is great room for error in the kill figures. However, it is interesting to note that their relationship to one another is reasonable and that average kills so computed compare very favorably with estimates made by biologists familiar with kills during the past few years.

TABLE 1
BROWN OR GRIZZLY BEAR

YEAR	TOTAL ALASKA HARVEST BY LICENSED HUNTERS	PERCENT FROM SUSITNA	TOTAL SUSITNA HARVEST	UNIT VALUE	ANNUAL SUSITNA VALUE
1942	399	.125	50	\$136.00	\$ 6,800
1943	350*	.125	44	136.00	5,984
1944	313	.125	39	136.00	5,304
1945	559	.125	70	136.00	9,520
1946	766	.125	96	136.00	13,056
1947	877	.125	110	136.00	14,960
1948	524	.125	66	136.00	8,976
1949	724	.125	91	136.00	12,376
1950	866	.125	103	136.00	14,688
1951	731	.125	91	136.00	12,376
1952	700*	.125	88	136.00	11,968
Total	6,809	.125	853		\$116,008
Average	619	.125	78	\$136.00	\$ 10,546

*Estimated

TABLE 2

CARIBOU

<u>YEAR</u>	<u>TOTAL NELCHIMA KILL</u>	<u>UNIT VALUE</u>	<u>ANNUAL NELCHIMA VALUE</u>
1947	200	\$175.00	35,000
1948	275	175.00	48,125
1949	350	175.00	61,250
1950	475	175.00	83,125
1951	600	175.00	105,000
1952	424	175.00	74,200
1953	625	175.00	109,375
Total	2,949		\$516,075
Average	421		\$ 73,675
75% to Copper	316		\$ 55,300
25% to Susitna	105		18,375

TABLE 3

MOOSE

<u>YEAR</u>	<u>TOTAL ALASKA HARVEST BY LICENCED HUNTERS</u>	<u>PERCENT FROM SUSITNA</u>	<u>TOTAL SUSITNA HARVEST</u>	<u>UNIT VALUE</u>	<u>ANNUAL SUSITNA VALUE</u>
1942	1,460	.226	330	340.00	112,200
1943			295*	340.00	100,300
1944	1,147	.226	259	340.00	88,060
1945	1,428	.226	322	340.00	109,480
1946	2,415	.226	546	340.00	185,640
1947	2,569	.226	581	340.00	197,540
1948	2,422	.226	547	340.00	185,980
1949	2,229	.226	504	340.00	171,360
1950	3,241	.226	732	340.00	248,680
1951	3,123	.226	706	340.00	240,040
1952	2,880	.226	651	340.00	221,340
1953			489*	340.00	166,260
Total	22,914		5,962		\$2,027,080
Average	2,291	.226	497	340.00	\$ 168,923

*Estimated

TABLE 4

MOUNTAIN SHEEP

YEAR	TOTAL ALASKA HARVEST BY LICENSED HUNTERS	PERCENT FROM SUSITNA	TOTAL SUSITNA HARVEST	UNIT VALUE	ANNUAL SUSITNA VALUE
1942	352	.267	94	\$150.00	\$14,100
1943	300*	.267	80	150.00	12,000
1944	Closed Season				
1945	253	.267	68	150.00	10,200
1946	385	.267	103	150.00	15,450
1947	272	.267	73	150.00	10,950
1948	188	.267	50	150.00	7,500
1949	No Take				
1950	196	.267	52	150.00	7,800
1951	320	.267	85	150.00	12,750
1952	300*	.267	80	150.00	12,000
Total	2,566		685		\$102,750
Average	233	.267	62	\$150.00	\$ 9,341

*Estimated

TABLE 5

SUSITNA BIG GAME
SUMMARY OF VALUES

SPECIES	AVERAGE ANNUAL TAKE	UNIT VALUE	AVERAGE ANNUAL VALUE	AVERAGE PERCENT OF TOTAL LICENSED ALASKAN HARVEST
Moose	497	\$340.00	\$168,923	.226
Caribou	105	175.00	18,375	.25 of Nelchina Harvest
Grizzly or Brown	78	136.00	10,546	.125
<u>Sheep</u>	<u>62</u>	<u>150.00</u>	<u>9,300</u>	<u>.267</u>
Total Value			\$207,165	
Rounded			\$210,000	

SMALL GAME

12. Ptarmigan and grouse are the only two small game animals included for economic purposes. Rabbits have not been included since few are taken in the Susitna for sport or fur. Small game constitutes the next to lowest valued resource with an average annual value of about \$44,000.

13. The period of record used in arriving at the average Susitna takes was ten years. No estimates were made for 1943. The starting point, subject to the same errors as big game, was 1942. Unit values used are from the River Basin Manual.

14. An interesting observation here is that grouse were worth three times as much as ptarmigan. This is probably due, at least in part, to the ptarmigan still being in the high country when the hunters are afield and therefore inaccessible; and partly due to the less cyclic nature of grouse.

TABLE 6

GROUSE

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	UNIT VALUE	ANNUAL SUSITNA VALUE
1942	27,847	.101	2,825	6.80	19,210
1943	Not available - no estimate made				
1944	54,000	.101	5,454	6.80	37,087
1945	41,000	.101	4,141	6.80	28,158
1946	53,000	.101	5,353	6.80	36,400
1947	47,109	.101	4,758	6.80	32,354
1948	40,000	.101	4,040	6.80	27,472
1949	28,000	.101	2,828	6.80	19,230
1950	50,000	.101	5,050	6.80	34,340
1951	70,000	.101	7,070	6.80	48,076
1952	70,000	.101	7,070	6.80	48,076
Total	480,956		48,616		\$330,403
Average	48,096	.101	4,862	\$6.80	\$ 33,040

PTARMIGAN

1942	52,262	.030	1,645	6.80	11,186
1943	Not available - no estimate made				
1944	50,000	.030	1,500	6.80	10,200
1945	57,000	.030	1,710	6.80	11,628
1946	36,000	.030	1,080	6.80	7,344
1947	53,354	.030	1,600	6.80	10,850
1948	60,000	.030	1,800	6.80	12,240
1949	50,000	.030	1,500	6.80	10,200
1950	58,000	.030	1,740	6.80	11,832
1951	55,000	.030	1,650	6.80	11,220
1952	78,000	.030	2,340	6.80	15,912
Total	549,616		16,565		\$112,642
Average	54,962	.030	1,657	\$6.80	\$ 11,264
Total Small Game Value					\$44,304
Rounded					\$44,000

FUR BEARERS

15. The following tables give the estimated annual take of all fur animals in the Susitna drainage except hare, squirrel, and marmot. It has been assumed that these three species, although present, have not been of significant worth to noticeably change the overall average value of peltries from the basin. Such pelts are worth about \$27,000 annually and fur bearers constitute the second most important group in the drainage.

16. The basic procedure in determining the number of pelts taken by species was as follows:

17. Total Alaska take of pelts was obtained from annual reports and Alaska Game and Fur Harvest Statistics. For certain years, either the known take of skins from the Susitna or a percentage figure was available. These figures are shown in red on the tables. Using these known points as a base, interpolation was made for other years by percent and an estimated harvest was computed. Fur prices were available from annual reports from 1925 through 1947. From 1948 to 1953, an estimated price was determined, which in most cases was about the same as the 1947 average. Based on these figures, average annual values were computed.

18. As has been explained previously, there is chance for error in using one year's percentage over a period of several years or in making interpolation between two known percentages. However, there exists a reasonable relationship from species to species which lends

a certain amount of credence to this method of determining average takes.

TABLE 7

BEAVER

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVEST
1925**	3,949	.154	213	20.00	4,260
1926**	1,047	.154	161	22.50	3,623
1927	24,602	.154	4,794	25.79	123,637
1928	32,712	.133	4,259	26.00	110,734
1929**	1,547	.133	206	26.25	5,408
1930**	476	.133	63	20.00	1,260
1931	13,499	.184	2,334	16.00	37,344
1932	15,609	.178	2,778	9.23	25,641
1933	30,159	.171	5,157	12.70	65,494
1934	44,823	.156	6,992	8.48	59,292
1935	11,138	.141	1,570	8.10	12,717
1936	25,046	.126	3,156	12.40	39,134
1937	1,882	.111	208	13.00	2,704
1938	30,389	.096	2,965	11.25	33,356
1939	31,397	.081	2,543	14.75	37,509
1940	14,630	.066	966	18.00	17,388
1941	20,606	.051	1,050	25.50	26,775
1942	17,593	.036	642	26.00	16,692
1943	15,146	.036	545	30.00	16,350
1944	8,516	.036	307	30.00	9,210
1945	11,339	.036	408	30.00	12,240
1946	18,929	.038	719	50.00	35,950
1947	25,088	.040	1,004	26.00	26,104
1948	20,133	.042	846	23.88	20,202
1949	23,394	.045	1,053	21.75	22,903
1950	17,619	.056	995	21.75	21,641
1951	17,506	.056	980	26.26	25,735
1952	18,617	.056	1,042	19.32	20,131
1953	15,163	.056	849	19.32*	16,403
Total	513,054		45,805		\$849,837
Average	17,692	.095	1,683	\$21.18	\$ 29,305

*Estimated

**Closed Season

TABLE 8

CROSS FOX

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA PELTERS
1925	577	.038	22	90.00	1,980
1926	611	.038	23	100.00	2,300
1927	1,085	.038	41	111.14	4,553
1928	761	.038	29	116.19	3,370
1929	1,069	.038	41	139.71	5,728
1930	1,149	.038	44	95.43	4,199
1931	664	.038	25	87.96	2,199
1932	922	.038	35	43.05	1,507
1933	919	.038	35	39.15	1,370
1934	1,014	.038	39	46.23	1,803
1935	1,355	.038	51	43.72	2,230
1936	1,573	.038	60	45.00	2,700
1937	1,031	.038	39	40.00	1,560
1938	1,103	.038	42	29.50	1,239
1939	614	.038	23	26.50	610
1940	632	.038	25	27.00	675
1941	1,484	.038	56	13.00	728
1942	1,264	.038	48	13.50	648
1943	1,240	.038	47	18.50	870
1944	1,831	.038	70	20.00	1,400
1945	1,614	.038	61	16.00	976
1946	1,096	.038	42	16.00	672
1947	785	.038	30	14.00	420
1948	510	.038	19	9.25*	176
1949	518	.038	20	4.50	90
1950	250	.038	10	4.50	45
1951	740	.038	28	4.00	112
1952	625	.038	24	3.00	72
1953	275	.038	10	2.72*	27
Total	27,311		1,039		\$44,259.
Average	942	.038	36	\$42.05	\$ 1,526

*Estimated

TABLE 9

RED FOX

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVESTS
1925	19,489	.022	429	17.00	7,293
1926	22,976	.022	505	20.00	10,100
1927	21,945	.022	483	28.18	13,611
1928	26,907	.022	592	38.23	22,662
1929	21,023	.022	463	49.60	22,965
1930	16,288	.022	358	34.40	12,315
1931	12,003	.022	264	22.98	6,067
1932	10,450	.022	230	10.88	2,502
1933	12,794	.022	281	12.07	3,392
1934	14,909	.022	328	12.71	4,169
1935	16,192	.022	356	9.65	3,435
1936	19,937	.022	439	11.75	5,158
1937	21,549	.022	474	10.80	5,119
1938	15,076	.022	332	9.25	3,071
1939	21,366	.022	470	7.50	3,525
1940	9,031	.022	199	7.00	1,393
1941	12,574	.022	277	9.50	2,632
1942	12,345	.022	268	11.00	2,948
1943	4,916	.022	108	16.00	1,728
1944	6,916	.022	152	16.00	2,432
1945	7,605	.022	167	12.50	2,088
1946	4,754	.022	105	12.00	1,260
1947	3,071	.022	68	4.00	272
1948	1,530	.022	34	3.57*	121
1949	1,560	.022	34	3.13	106
1950	2,220	.022	49	2.94	144
1951	1,875	.022	41	3.00	123
1952	1,250	.022	28	2.72	20
1953	825	.022	18	2.72*	13
Total	343,376		7,552		\$140,664
Average	11,841	.022	260	\$13.63	\$ 4,851

*Estimated

TABLE 10

LYNX

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVEST
1925	7,920	.067	531	17.00	9,027
1926	7,495	.067	502	20.00	10,040
1927	9,809	.067	657	29..7	19,362
1928	10,173	.067	682	45.35	30,861
1929	7,575	.067	508	61.10	31,039
1930	2,980	.067	200	57.00	11,400
1931	623	.067	42	43.50	1,827
1932	502	.067	34	23.29	792
1933	591	.067	40	21.25	850
1934	723	.067	48	21.44	1,029
1935	1,338	.067	90	21.50	1,935
1936	2,421	.067	162	36.25	5,873
1937	2,089	.067	140	31.60	4,424
1938	2,130	.067	143	36.00	5,148
1939	2,705	.067	131	37.50	6,788
1940	1,698	.067	114	43.50	4,959
1941	781	.067	52	43.00	2,236
1942	639	.067	43	45.00	1,935
1943	713	.067	48	48.00	2,304
1944	990	.067	66	50.00	3,300
1945	955	.067	64	60.00	3,640
1946	1,195	.067	80	55.00	4,400
1947	965	.067	65	24.00	1,560
1948	1,110	.067	74	16.90*	1,251
1949	854	.067	57	9.81	559
1950	680	.067	46	10.07	463
1951	900	.067	60	14.47	8.68
1952	600	.067	40	7.33	293
1953	900	.067	60	7.33*	440
Total	72,054		4,829	\$168,803	
Average	2,485	.067	167	\$32.30	\$ 5,821

*Estimated

TABLE 11

MARTEN

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVEST
1925**					
1926**					
1927**					
1928**					
1929**					
1930**					
1931	7,054	.159	1,124	16.35	18,377
1932	3,289	.157	516	12.29	6,342
1933	4,022	.145	583	13.90	8,104
1934	4,866	.133	647	14.06	9,097
1935	3,314	.121	491	14.80	5,935
1936	1,306	.109	142	20.00	2,340
1937	16,969	.097	1,646	27.35	45,018
1938	9,237	.085	785	24.75	19,429
1939	1,287	.073	940	26.00	24,440
1940	9,626	.061	587	32.00	18,734
1941	707	.056	396	39.00	15,444
1942**	240	.051	12	34.00	408
1943	8,812	.046	405	44.00	17,920
1944	13,352	.041	547	45.00	24,615
1945	453	.036	16	60.00	960
1946	2,670	.031	828	80.00	66,240
1947	13,413	.031	416	40.00	16,640
1948	10,833	.027	294	35.72*	10,502
1949	14,141	.023	325	31.44	10,218
1950	8,200	.033	271	30.07	8,149
1951	9,500	.061	580	30.27	17,557
1952	6,350	.027	171	17.80	3,044
1953	5,500	.023	127	17.80*	2,261
Total	155,191		11,759		\$352,224
Average	6,747	.076	511	\$30.72	\$ 15,314

* Estimated

**Closed Season

TABLE 12

MINK

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA HARVEST	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVEST
1925	59,504	.036	2,142	7.00	14,994
1926	44,674	.040	1,787	12.00	21,444
1927	45,466	.047	2,137	14.52	31,029
1928	32,353	.054	1,747	15.87	27,725
1929	26,695	.060	1,602	20.70	33,161
1930	27,785	.054	1,500	8.50	12,750
1931	30,431	.047	1,430	9.60	13,728
1932	43,207	.040	1,728	5.69	9,832
1933	50,812	.036	1,829	6.05	11,065
1934	57,558	.036	2,083	9.16	19,080
1935	60,501	.036	2,178	7.20	15,652
1936	44,016	.036	1,585	10.50	16,643
1937	52,436	.036	1,838	12.40	23,411
1938	39,866	.036	1,435	11.50	16,503
1939	42,883	.036	1,544	9.75	15,054
1940	43,702	.036	1,573	8.50	13,371
1941	31,782	.036	1,144	10.50	12,012
1942	30,919	.036	1,124	9.75	10,959
1943	33,705	.036	1,213	12.50	15,163
1944	61,038	.036	2,197	11.00	24,167
1945	46,188	.036	1,662	18.00	29,916
1946	48,088	.037	1,731	30.00	51,930
1947	53,000	.037	1,961	16.25	31,866
1948	36,662	.037	1,556	19.33*	26,211
1949	39,348	.049	1,928	22.40	43,187
1950	28,000	.062	1,736	28.13	48,834
1951	22,000	.061	1,342	31.43	42,179
1952	39,200	.060	2,352	21.09	49,604
1953	25,000	.060	1,500	21.09*	31,635
Total	1,197,119		49,434		\$713,135
Average	41,280	.041	1,705	\$14.50	\$ 24,590

*Estimated

TABLE 13

MUSKRATS

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVESTS
1925	395,142	.013	5,137	.25	4,366
1926	183,320	.013	2,353	1.40	3,336
1927	155,041	.013	2,016	1.95	3,931
1928	197,957	.013	2,573	1.33	3,422
1929	190,377	.013	2,475	1.02	2,525
1930	411,934	.013	5,355	.56	2,999
1931	455,897	.013	5,927	.62	3,675
1932	500,640	.013	6,508	.36	2,343
1933	154,573	.013	2,009	.55	1,105
1934	133,312	.013	1,733	.73	1,265
1935	127,901	.013	1,663	.80	1,330
1936	153,772	.013	1,999	1.25	2,499
1937	231,342	.013	3,014	1.15	3,466
1938	291,140	.013	3,725	.66	2,498
1939	417,442	.013	5,427	.82	4,450
1940	453,300	.013	5,893	1.10	6,482
1941	266,901	.013	3,487	1.60	5,579
1942	267,356	.013	3,476	1.75	6,033
1943	212,352	.013	2,761	2.00	5,522
1944	142,530	.013	1,853	2.00	3,706
1945	147,536	.013	1,918	1.80	3,452
1946	145,899	.013	1,886	2.25	4,244
1947	160,312	.013	2,084	2.00	4,168
1948	125,233	.013	1,628	1.62*	2,637
1949	142,843	.013	1,857	1.25	2,321
1950	198,000	.013	2,574	1.66	4,273
1951	261,000	.013	3,393	1.88	6,379
1952	163,000	.013	2,119	1.12	2,373
1953	138,000	.013	1,794	1.12*	2,009
Total	6,822,852		83,727		\$102,438
Average	235,271	.013	3,060	\$1.28	\$ 3,532

*Estimated

TABLE 14

LAND OTTER

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVEST
1925	3,265	.031	101	19.00	1,919
1926	2,932	.031	91	21.0*	1,911
1927	2,783	.031	86	22.80	1,961
1928	2,191	.031	99	24.68	2,443
1929	2,943	.031	91	31.58	2,698
1930	3,491	.031	108	23.00	2,484
1931	2,432	.031	75	18.00	1,350
1932	2,284	.031	71	7.93	563
1933	3,211	.031	100	11.37	1,137
1934	3,897	.031	121	13.56	1,641
1935	3,224	.031	100	13.30	1,330
1936	3,235	.031	100	14.00	1,400
1937	3,007	.031	93	14.00	1,302
1938	2,892	.031	90	12.75	1,148
1939	2,792	.031	87	11.00	957
1940	2,804	.031	87	10.50	914
1941	2,188	.031	63	14.50	986
1942	2,821	.031	88	13.00	1,144
1943	1,547	.031	48	17.50	840
1944	2,772	.031	86	20.00	860
1945	2,246	.031	70	20.00	1,400
1946	2,836	.031	88	30.00	2,640
1947	2,936	.031	93	30.00	2,790
1948	2,799	.031	87	22.57*	1,964
1949	2,287	.031	71	15.14	1,075
1950	2,660	.031	82	18.90	1,550
1951	2,400	.031	74	27.86	2,062
1952	2,950	.031	91	20.86	1,898
1953	2,340	.031	73	20.86*	1,523
Total	81,215		2,519		\$46,090
Average	2,801	.031	87	\$18.61	\$ 1,589

*Estimated

TABLE 15
WEASEL (Ermine)

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA FLAKES
1925	13,418	.065	872	.80	698
1926	10,387	.065	675	1.60	1,080
1927	8,663	.065	563	1.85	1,042
1928	10,253	.065	665	2.04	1,359
1929	17,467	.065	1,135	1.74	1,975
1930	11,582	.065	753	1.15	866
1931	15,358	.065	998	1.15	1,148
1932	17,536	.065	1,140	.44	502
1933	11,372	.065	739	.56	414
1934	14,278	.065	928	.69	640
1935	19,279	.065	1,253	.55	689
1936	11,012	.065	716	.70	501
1937	8,453	.065	549	.80	439
1938	9,755	.065	634	.55	349
1939	13,828	.065	899	.60	539
1940	9,895	.065	643	.60	366
1941	8,580	.065	556	.85	474
1942	11,280	.065	730	.90	657
1943	3,892	.065	253	1.10	273
1944	5,508	.065	358	1.00	358
1945	5,737	.065	373	1.40	522
1946	6,298	.065	409	1.50	614
1947	5,722	.065	372	1.25	465
1948	7,852	.065	510	1.42*	724
1949	8,801	.065	572	1.59	909
1950	6,740	.065	438	1.59	696
1951	8,000	.065	520	1.73	926
1952	5,230	.065	340	1.75	595
1953	3,000	.065	195	1.75*	341
Total	289,176		18,791		\$20,986
Average	9,716	.065	648	\$1.16	\$ 729

*Estimated

TABLE 16
SUSITNA FUR BEARERS
SUMMARY OF VALUES

<u>SPECIES</u>	<u>ANNUAL AVERAGE TAKE</u>	<u>AVERAGE PRICE OF FUR</u>	<u>AVERAGE ANNUAL VALUE</u>	<u>AVERAGE PERCENT OF TOTAL ALASKA TAKE</u>
Beaver	1,683	\$21.18	\$29,305	.095
Mink	1,705	\$14.50	\$24,590	.041
Marten*	511	\$30.72	\$15,314	.076
Lynx	167	\$32.30	\$ 5,821	.067
Red Fox	260	\$13.83	\$ 4,850	.022
Muskrat	3,060	\$ 1.28	\$ 3,532	.013
Land Otter	87	\$18.61	\$ 1,589	.031
Cross Fox	36	\$42.05	\$ 1,526	.031
Weasel	648	\$ 1.16	\$ 724	.065
Total Value			\$87,252	
Rounded			\$87,000	

*Based on 23-year period of record.
All others based on 29-year period.

PREDATORY-TYPE ANIMALS

19. Wolf, coyote, and wolverine have been separated from the fur bearer class since they represent a rather unique category insofar as wildlife is concerned. Although River Basin policy does not evaluate predators, it is believed that Alaska represents a special case and values should be considered. The take by Fish and Wildlife Service agents has not been considered in the total Alaska take; neither has the amount paid in bounties been considered in computing values. This group has an estimated average annual value of about \$2,900, the lowest valued group in the basin.

20. As was true for other groups, 1942 (shown in red) has been the common starting point and the same percentage was used for the entire 29-year period of record.

TABLE 17

COYOTE

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA HARVEST	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA DELIVERIES
1925	61	.207	13	7.00	91
1926	113	.207	23	7.00	161
1927	191	.207	40	13.40	536
1928	621	.207	128	16.25	2,030
1929	480	.207	99	20.50	2,030
1930	306	.207	63	13.00	819
1931	206	.207	43	9.48	408
1932	216	.207	45	4.11	185
1933	299	.207	62	4.73	293
1934	439	.207	91	5.76	524
1935	297	.207	61	5.25	320
1936	1,098	.207	227	6.70	1,521
1937	1,330	.207	275	8.25	2,269
1938	1,355	.207	280	5.75	1,610
1939	1,507	.207	312	4.50	1,424
1940	2,080	.207	430	5.00	2,150
1941	1,208	.207	250	4.50	1,125
1942	757	.207	157	6.25	981
1943	376	.207	78	8.50	663
1944	797	.207	165	8.00	1,320
1945	713	.207	148	8.00	1,184
1946	1,020	.207	211	6.00	1,266
1947	1,308	.207	271	4.00	1,084
1948	1,034	.207	214	5.00*	1,070
1949	355	.207	73	5.00*	365
1950	706**	.207	146	5.00*	730
1951	619**	.207	128	5.00*	640
1952	402**	.207	83	5.00*	415
1953	347**	.207	72	5.00*	360
Total	20,241		4,183		\$27,604
Average	698	.207	144	\$ 6.61	\$ 952

*Estimated

**Exclusive of FWS Take

TABLE 18

WOLF

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA HARVEST	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA HARVEST
1925	247	.060	14	12.00	163
1926	232	.060	14	12.00	162
1927	468	.060	16	23.90	382
1928	536	.060	32	26.00	1,214
1929	688	.060	41	41.55	1,704
1930	355	.060	21	26.00	546
1931	263	.060	16	26.00	416
1932	258	.060	15	22.00	330
1933	387	.060	23	8.00	164
1934	757	.060	45	22.00	990
1935	642	.060	39	21.25	829
1936	904	.060	54	19.50	1,053
1937	730	.060	44	23.70	1,043
1938	640	.060	38	15.50	589
1939	405	.060	24	17.00	403
1940	444	.060	27	18.00	426
1941	599	.060	36	15.00	540
1942	620	.060	37	13.50	500
1943	351	.060	21	20.00	420
1944	418	.060	25	15.00	375
1945	851	.060	51	20.00	1,020
1946	1,055	.060	63	10.00	630
1947	1,563	.060	94	20.00	1,880
1948	793	.060	48	19.04*	914
1949	488	.060	29	18.03	523
1950	904**	.060	54	18.12	978
1951	581**	.060	35	19.13	670
1952	779**	.060	47	25.00	1,175
1953	435**	.060	29	25.00*	725
Total	17,440		1,032		\$20,860
Average	601	.060	36	\$19.73	\$ 719

*Estimated

**Exclusive of FWS Take

TABLE 19

WOLVERINE

YEAR	TOTAL ALASKA HARVEST	PERCENT FROM SUSITNA	SUSITNA HARVEST	AVERAGE ALASKA PRICE	VALUE OF SUSITNA PELICES
1925	360	.252	91	8.00	728
1926	468	.252	118	15.00	1,770
1927	809	.252	204	22.10	4,508
1928	831	.252	209	21.27	4,445
1929	873	.252	220	19.95	4,389
1930	495	.252	125	10.50	1,313
1931	406	.252	102	8.74	891
1932	234	.252	59	3.60	212
1933	281	.252	71	4.50	320
1934	279	.252	70	3.50	245
1935	260	.252	70	5.50	385
1936	290	.252	73	7.40	540
1937	369	.252	93	6.20	577
1938	2434	.252	62	6.00	372
1939	228	.252	57	5.50	314
1940	326	.252	82	5.50	451
1941	232	.252	58	5.75	334
1942	246	.252	62	7.00	434
1943	92	.252	23	8.50	196
1944	87	.252	22	15.00	330
1945	482	.252	121	15.00	1,815
1946	746	.252	188	15.00	2,820
1947	630	.252	159	11.00	1,749
1948	527	.252	133	12.19*	1,621
1949	369	.252	93	13.37	1,243
1950	490	.252	123	12.12	2,229
1951	500	.252	126	20.63	2,599
1952	350	.252	88	21.50	2,420
1953	400	.252	101	27.50*	2,778
Total	11,908		3,003		\$42,028
Average	411	.252	104	\$12.06	\$ 1,449

*Estimated

TABLE 20
SUSITNA - PREDATORY TYPE ANIMALS
SUMMARY OF VALUES

<u>SPECIES</u>	<u>ANNUAL AVERAGE TAKE</u>	<u>AVERAGE PRICE OF HIDE</u>	<u>AVERAGE ANNUAL VALUE</u>	<u>AVERAGE PERCENT OF TOTAL ALASKA TAKE</u>
Wolverine	104	\$12.06	\$1,449	.252
Coyote	144	\$ 6.61	\$ 952	.207
<u>Wolf</u>	<u>36</u>	<u>\$19.73</u>	<u>\$ 719</u>	<u>.060</u>
<u>Total Value*</u>			\$3,120	
Rounded			\$3,100	

*Bounty Payments Not Included

WATERFOWL

21. About \$61,000 annually could be assigned to ducks and geese in the Susitna on a hunter-take basis. This method was used in lieu of adequate duck-day or goose-day information. As annual transects are run in the Lake Louise and Lower Susitna areas, information will then become available on which to make duck-day or goose-day estimates. Undoubtedly, evaluation by the day-use method will result in a much lower value than that being given in this report.

TABLE 21

DOCKS

YEAR	TOTAL ALASKA HARVEST BY LICENSED HUNTERS	PERCENT FROM SUSITNA	TOTAL SUSITNA HARVEST	UNIT VALUE	ANNUAL SUSITNA VALUE
1942	80,045	.111	8,915	\$8.16	72,746
1943	60,000*	.111	6,660	\$8.16	54,346
1944	51,653	.111	5,733	\$8.16	46,781
1945	50,405	.111	5,595	\$8.16	45,655
1946	71,830	.111	7,973	\$8.16	65,060
1947	69,416	.111	7,705	\$8.16	62,873
1948	52,552	.111	5,583	\$8.16	48,005
1949	60,025	.111	6,627	\$8.16	54,076
1950	64,077	.111	7,113	\$8.16	58,042
1951	65,860	.111	7,310	\$8.16	59,650
1952	60,000*	.111	6,560	\$8.16	54,346
Total	685,863	.111	76,174	\$8.16	\$621,580
Average	62,351	.111	6,925	\$8.16	\$56,508

GEFSE

1942	13,118	.031	410	\$16.32	26,691
1943	9,000*	.031	279	16.32	4,553
1944	6,098	.031	169	16.32	3,034
1945	8,934	.031	277	16.32	4,521
1946	12,429	.031	385	16.32	6,233
1947	10,623	.031	329	16.32	5,369
1948	9,920	.031	308	16.32	5,027
1949	8,653	.031	268	16.32	4,374
1950	9,807	.031	304	16.32	4,961
1951	9,008	.031	279	16.32	4,553
1952	9,000	.031	279	16.32	4,553
Total	106,595		3,307		\$53,969
Average	9,690	.031	301	16.32	4,912
Total Waterfowl Value					\$61,420
Rounded					\$61,000

*Estimated

TABLE 22
SUMMARY OF GROUP VALUES

<u>GROUP</u>	<u>AVERAGE ANNUAL GROUP VALUE</u>
Big Game	\$207,185
Small Game	44,304
Fur Bearers	87,252
Predatory Type Fur Bearers	3,120
Waterfowl	61,420
TOTAL	\$403,281
ROUNDED	\$400,000

PROPOSED WORK PLAN

22. Since the Bureau of Reclamation has halted field investigations in the Susitna Drainage, field work will be curtailed during the next year. However, certain work is planned during the next twelve months.

1. A limited economic survey was initiated incidental to the sheep, moose, and caribou checking station activities. When this data is compiled and analyzed, unit values for these three species in the Susitna and Copper River Basins, as well as the rest of the Territory, will be available.

2. A delineation of high value wildlife lands is planned in order that the impact of future land or water-use development upon wildlife resources of the basin may be more readily determined.

3. Total kill of big game animals, the most important wildlife group is essential for accurate reporting. During the next hunting season, it has been recommended that big game hunters be required to report their kills by species, location, and date. Such information would be tabulated by the River Basins staff in Anchorage.

4. Waterfowl transects measuring production are planned for the Lake Louise and lower Susitna areas. In addition, dates and numbers during the migration season will be gathered as time and monies permit.

5. The trend of wildlife and potential values will receive some consideration.

23. The next progress report should include the above as salient features of the report as well as revision of the annual harvest and values as more specific information becomes available.

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