

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
Yellowstone National Park, Wyoming

The following wildlife population figures for Yellowstone, taken from the Annual Wildlife Report (5/1/69 to 4/30/70), are to be used in interpreting wildlife populations in the Park.

| SPECIES           | ESTIMATED<br>POPULATION | RELATIVE<br>POPULATION | POPULATION<br>TREND |
|-------------------|-------------------------|------------------------|---------------------|
| Antelope          | 170                     | CL                     | U                   |
| Badger            |                         | CL                     | S                   |
| Bear, Black       | 500                     | AG                     | S                   |
| Bear, Grizzly     | 250                     | CG                     | S                   |
| Beaver            |                         | R                      | S                   |
| Bighorn           | 600*                    | CL                     | U                   |
| Bison             | 580                     | AL                     | U                   |
| Bobcat            |                         | R                      | S                   |
| Chipmunk          |                         | AG                     | S                   |
| Cougar            |                         | R                      | S                   |
| Coyote            |                         | AG                     | S                   |
| Deer, Mule        | 500**                   |                        |                     |
| Elk               | 8300**                  | CG                     | U                   |
| Fox, Red          |                         | R                      | S                   |
| Gopher, Pocket    |                         | AL                     | S                   |
| Marmot            |                         | CL                     | S                   |
| Marten            |                         | CL                     | S                   |
| Mink              |                         | CL                     | S                   |
| Moose             | 450***                  | CG                     | S                   |
| Muskrat           |                         | CL                     | S                   |
| Otter, River      |                         | CL                     | S                   |
| Pica              |                         | CL                     | S                   |
| Porcupine         |                         | CL                     | S                   |
| Cottontail Rabbit |                         | CL                     | S                   |
| Jack Rabbit       |                         | R                      | S                   |
| Snowshoe Rabbit   |                         | CG                     | S                   |
| Small Rodents     |                         | AG                     | S                   |
| Ground Squirrel   |                         | AL                     | S                   |
| Tree Squirrel     |                         | AG                     | S                   |
| Weasel            |                         | CG                     | S                   |
| Wolf              |                         | R                      | S                   |
| Wolverine         |                         | R                      | S                   |
| Bald Eagle        |                         | R                      | S                   |
| Trumpeter Swan    |                         | CL                     | S                   |

CODE:

|     |                    |                         |              |
|-----|--------------------|-------------------------|--------------|
| *   | Minimum population | AG - Abundant Generally | R - Rare     |
| **  | Winter             | AL - Abundant Locally   | S - Static   |
| *** | Summer             | CG - Common Generally   | SU Static-Up |
|     |                    | CL - Common Locally     |              |

Estimated elk populations - winter: Northern Yellowstone herd, 6000;  
Gallatin herd, 1200; Madison-Firehole herd, 1000; other 100.

Summer - Northern Yellowstone herd, 7200; Gallatin herd, 1500;  
Madison-Firehole herd, 1200; southern herd, 4100; other, 120.

7200  
1500  
1200  
4100  
120  
14120

## CHECK LIST-MAMMALS

masked shrew  
vagrant shrew  
dusky shrew  
water shrew

little brown bat  
long eared bat  
silver haired bat  
big brown bat  
hoary bat  
western big eared bat

cony or pika  
white tail jack rabbit  
varying hare  
cottontail

yellowbelly marmot  
Uinta ground squirrel  
golden mantled ground squirrel  
least chipmunk  
yellow pine chipmunk  
Uinta chipmunk  
chickaree, red squirrel  
flying squirrel  
pocket gopher  
beaver  
white footed mouse  
bushytail woodrat  
red back vole  
lemming mouse

meadow mouse - Microtus richardsoni  
Microtus pennsylvanicus  
Microtus montanus (M. nanus)  
Microtus longicaudus (M. mordax)

muskrat  
jumping mouse  
porcupine

coyote  
wolf  
red fox  
black bear  
grizzly

raccoon

marten  
fisher

weasel, short tail  
longtail weasel  
mink  
wolverine  
badger

skunk  
otter

cougar  
lynx  
bobcat

wapiti or elk  
mule deer  
white tail deer

moose  
pronghorn or antelope  
bison or buffalo  
mountain sheep

\*\*\*\*\*

## Suggested locations and seasons for sighting certain mammals

As a general statement, big game animals are readily seen along in May before elk and bison begin to drift to the high country. This is one of the best wildlife months for many species as well as waterfowl, in from migration but not yet away from main rivers.

cony or pika, year round

rockslides such as Silver Gate  
above Mammoth

Yellowbelly marmot, summer only

Old Faithful nature trail to  
Observation Point, Canyon area on  
far side of river

Uinta ground squirrel, summer only

open grassy areas of sagebrush

pocket gopher, summer only

Tower

|                             |                                                                                                                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| beaver, summer              | Many of the present population are bank denners; such areas as Grayling Creek on the Gallatin side, lower Shoshone Creek, small ponds in the Mammoth area.                                                             |
| red fox, year round         | Blacktail Valley, along the road occasionally from Tower to Mammoth                                                                                                                                                    |
| grizzly, spring, summer     | grazing in places such as Gibbon meadows April-May; may be seen in mid-summer on far side of Yellowstone River in Hayden Valley; back roads such as old Tower and Bunsen Peak; rarely seen from roads except as noted. |
| badger, summer              | sagebrush valleys of northern part of Park, sometimes seen along road to Tower                                                                                                                                         |
| otter, year round           | Yellowstone River in Hayden Valley, shore of Yellowstone Lake, Gibbon and other rivers.                                                                                                                                |
| cougar, year round          | (very seldom reported) seems to be Tower Area, sometime Hayden Valley; Mammoth-Sepulcher-Electric Peak area                                                                                                            |
| elk or wapiti, winter       | drive to NE Entrance, early and late hours best; may be seen in numbers on Hellroaring slopes                                                                                                                          |
| Year round                  | Clearwater Springs-Roaring Mountain area                                                                                                                                                                               |
| Summer, fall                | Norris area                                                                                                                                                                                                            |
| Spring, fall                | Lower Geyser Basin meadows                                                                                                                                                                                             |
| mule deer, winter, summer   | Mammoth, road from Mammoth to Golden Gate - Swan Flat                                                                                                                                                                  |
| moose, spring, year round   | Lava Creek, Tower Jct., NE entrance road, Willow Park, Hayden Valley, Pelican Creek (lower) and Fishing Bridge                                                                                                         |
| pronghorn, year round       | Old road Mammoth to Gardiner, road from North Entrance to Reese Creek, flat by N. entrance station                                                                                                                     |
| bison, fall, winter, spring | Lamar Valley and Soda Butte, Firehole Geyser Basins, especially Firehole Lake and Fountain Freight roads                                                                                                               |
| summer                      | Lower Geyser Basin and Madison Junction                                                                                                                                                                                |
| mountain sheep              |                                                                                                                                                                                                                        |
| winter                      | Slopes of Mt. Everts above road to Gardiner from Mammoth                                                                                                                                                               |
| summer                      | Mt. Washburn, Mt. Everts, Specimen Ridge and Fossil Forest Trail                                                                                                                                                       |

Add To Den Paper

Bear day beds

Bear-man relationships at den

Frank

# WILDLIFE MONOGRAPHS

*A Publication of The Wildlife Society*

OFFICE OF THE EDITOR • DEPARTMENT OF BIOLOGY  
UNIVERSITY OF LOUISVILLE LOUISVILLE, KENTUCKY 40208

1 June 1970

Dr. John J. Craighead  
Montana Cooperative Wildlife Research Unit  
University of Montana  
Missoula, Montana 59801

Dear John:

Thank you for your letter of 15 May regarding the hibernation and denning of grizzly bears. I don't see any reason why this paper can not be published as a WILDLIFE MONOGRAPH provided it is the necessary 32 pages long. We are perfectly willing to use all the figures, diagrams, and photographs that are deemed necessary but at the same time we do not want to overdo it. I will be very happy to look at the manuscript and to give you an honest appraisal.

I did indicate that publication date is about 5 to 6 months following receipt of a finished manuscript. This short time, of course, depends on the ability of the reviewers and the author to get together. I think that we can do it fairly easily since I am sure you will have the manuscript in excellent shape when I receive it. The time required from when I send the manuscript to the printer and the final date of publication usually is 3 to 4 months. The manuscript for WILDLIFE MONOGRAPH NO. 22 was sent to the printer on 9 February and the first page proof was received before the end of March. Corrections on that page proof were made by me and by the author and the final page proof returned to the printer by 20 April. The MONOGRAPH was distributed 26 May. That is a blow by blow description of NO. 22. I should add here however, that much revision of the manuscript as it was originally presented to me required another 3 months. Sometimes the reviewers are not very prompt in going over the manuscript.

I am looking forward the receiving the manuscript on elk and on the management of grizzly bears.

With very best wishes,

Cordially,

  
Louis A. Krumholz  
Editor

note: Frank - maybe we should define "final" snowstorm?

-28-3

*John*  
(Eisentraut, 1960). This did not appear to be the case with the grizzlies under observation. During previous fall periods with more prolonged cold, they did not exhibit lethargy prior to denning. However, an early fall period of snow and unusual cold that occurred from September 15 through September 28 1965, with a minimum temperature of  $-13.9^{\circ}$  C. ( $7^{\circ}$  F.) and 6" of snow on the ground did disperse grizzlies from summer to fall ranges. This unusually cold weather early in the fall may have brought on lethargy earlier than usual and well before the environmental stimulus of a "final" snowstorm *for the winter* caused them to enter their dens on or about November 11, ~~for the winter~~.

#### Defense of Dens

*and radiotracking data*  
Our observations indicate that the Yellowstone grizzlies are not territorial. We have observed more than 20 *compensatory movement (Craighead 1956) or* grizzlies at one carcass feeding *We have never observed the defense of a home range or mutual avoidance (Hornaker 1970).* together with surprisingly little friction. *most likely* We thought that if grizzlies defended specific areas, these areas would be in the vicinity of their winter dens. Here they might also attack a man. However, during our visits to dens we were not attacked, but on the contrary the animals tended to sneak away and generally were unobtrusive. *man or* We observed no *real* defense of a den or den area *over (B)* against either *man or* other grizzlies, ~~or man~~.

#### Period of Winter Sleep

On December 28, 1966 we visited the winter den of grizzly No. 40 and her two cubs of the year. We approached the den from below on snowshoes and could see that the den entrance was still open. There were no signs to indicate ~~that~~ the bears had left the den since entering in November. To peer in, we had to slide head first down the inclined entrance-way. In this awkward

- (a) When ~~grizzlies~~ we approached grizzlies feeding on carcasses they tended to flee rather than to make a defensive stand. Occasionally they ran toward us making it prudent ~~for~~ to climb trees. These were not attacks but situations where grizzlies scented us but had not pinpointed our position.

- (B) On one occasion when very close to the den of No. 158 our radio signal indicated the grizzly bear family was moving toward us through dense doghair lodgepole pine. Immediately after climbing trees our signal revealed that grizzlies were running away, apparently having detected us. ~~Another~~ Grizzly No. 101 growled threateningly, then retreated, when we approached close ~~through dense timber and~~ to the second of two dens she dug in the fall of 1967 (Table 3).