

NEVADA FISH and GAME

In Part

Vol. I

JUNE-JULY 1954

No. 5



What's Happening to the Sage Hen?

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Sage Hen Population Shows Steady Decline Northeastern Nevada

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Cover photo courtesy Fish and Wildlife.

Sportsmen over the State are concerned about the future of our Sage Hen, or Sage Grouse, and rightly so! The personnel of the Nevada Fish and Game Commission is also concerned about the future of this bird, the largest grouse native to North America.

In the areas where this grouse is most widespread, that is, northeastern Nevada, the population has shown a steady decline since 1950. The decrease of adult birds between 1951 and 1952 was about 50 to 60 percent; however, a good hatch in 1952 gave us a high enough population to permit a season. The size of this hatch was reflected in a 36 percent increase in adult birds in 1953, but the loss of most of our 1953 broods resulted in the over-all population showing a decrease of about 39 percent, and no open season was held. The strutting ground surveys during the past two months have shown a decrease of over 40 percent from the spring of 1953, and a population estimated at about 10 percent of the 1949 level. This decrease is in spite of the closed season in 1953.

Hunting seems to have had very little influence in bringing about this decrease in the grouse population in northeastern Nevada. The areas most heavily hunted in 1951 and 1952 have shown no greater decrease, and often less decrease, than areas closed to hunting.

The obvious answer then seems to be heavier and consistent hunting pressure. However, this does not hold true either. Idaho hunters take a heavy harvest from a group of birds

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WASHOE PONDS

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fish for a total figure of 57,535, while the 1952-1953 operation came through with just under 14,000 pounds for a total of 124,000 fish of the various species. The current 1953-1954 operation will far exceed that, but a great part of the fish have not as yet been shipped. As of this writing, over 12,000 pounds totaling more than 94,000 fish have been shipped and as yet none of the ponds have been emptied though most have been seined. Certain improvements will tend to boost production still higher in future years.

One improvement in particular is worthy of mention here, as a gimmick that is pretty certain to increase the rearing capacity of the ponds. It is a recirculation system powered by a large propellor-type pump. Its function is to catch water at the lower end of a series of ponds, return it to the top of the ponds and flow it through the ponds again. In practice, this creates a current through a given pond that is four or five times as great as that provided by the original flow. This recirculation system has been set up to repump the water in one entire series of nine ponds and it is anticipated that this will materially raise the poundage levels of those ponds.

The ponds themselves have dirt sides and bottoms. Nine of these have been overlaid with gravel which makes for a much better arrangement. The balance of the ponds will be treated in a similar fashion when funds become available for the purpose. In practice, the ponds are seined as the fish are needed. Toward

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A "pod" of musk from the musk deer of the Orient is worth five dollars in Mongolia; more in other parts of China. It is valuable in the manufacture of perfume.

OUR NEVA

By GEO

Eleven Pennies for Better H

Individual States select projects, based on wildlife recommended by their own. However, no State can waste tax money, for unsound projects may be disapproved by the U. S. Fish and Wildlife Service.

This general summary of Pittman-Robertson funds are selected by the States was prepared by the Wildlife Management Institute, which depends on the sportsmen to aid the Federal and State services to function better.

Eleven Pennies in Action

The Pittman-Robertson Restoration Program operates on an 11-cent tax from the sportsman and ammunition dollar. It maintains and increases game herds, through land purchase, improvement and research. The mula based on paid hunting and area of the State, each its share of the annual tax. The Territories also receive assistance. The State Game Departments select, plan, and their programs after approval by the U. S. Fish and Wildlife Service. States own all lands purchased. The improvements made on the Project costs are paid on a one-fourth by the State and three-fourths by Pittman-Robertson.

Five Pennies Improving Game

Seventy-five thousand quail, pheasants and rabbits. Eight miles of multiflora rose hedges, pedeza plots to feed one thousand quail coveys.

(Continued on page 1)

ELEVEN PENNIES

(Continued from page 15)

es—small ones, one acre and
w York; Giant Roseau, fifty-
sand acres in Minnesota.

ty States—turkey, antelope,
Seasons restored in State
te.

in arid States, new watering
ve extended the game range.

Pennies Buying Wildlife Lands

ive States have bought wild-
s—more land than in the
Delaware. These areas pro-

s for ducks,
for upland game,
range for big game,
where you can hunt.

One Penny For Maintenance

ining improvements keeps
reas at top production.

One Penny For Administration

ing, planning, supervising, to
ost out of each penny.

Two Pennies Factfinding

h points the way to game
e and maximum harvest.
R research has come modern
agement that provides game
as many hunters as in 1938.

cket gopher can run down
ackwards about as fast as it
irst, by using its sensitive
uide.

h reveals that the pocket
ncisor teeth grow at the rate
es a year, or almost an inch
lis incessant gnawing keeps
1 down for practical use.

species of the trilobite, a
ll fish," had in each of their
eyes from 14,000 to 15,000
separate eyes.

SAGE HEN POPULATION

(Continued from page 14)

adjacent to our O'Neil area. Idaho's
population now is just as low as ours
in the relatively unhunted portion of
the O'Neil basin.

If hunting is not the answer to these
population fluctuations, then what is?
Wildlife technicians are still at a loss
to explain the drastic fluctuations in
this magnificent grouse. We do know
that the numbers of most other species
of North American grouse are subject
to drastic periodic decreases and sub-
sequent resurgence. These we call
grouse cycles. We know that adverse
weather conditions and increased loss-
es to disease and parasites often
accompany these decreases, but the
general concensus of opinion is that
these factors are secondary and that
the major factor causing these de-
clines is still unknown. Correlation
with sunspot activity has been par-
tially established, and a theory con-
cerning ultraviolet radiation and its
effect upon the nutritive values of the
buds and leaves of the plants upon
which these grouse depend, has been
advanced. This, perhaps, seems to
enter the realm of fantasy, but still
it is as widely accepted as any other
current theory on cyclic behavior.

Sage Grouse populations are cur-
rently showing spotty behavior in the
Western States. Discussions at the
recent Western Association of State
Game and Fish Commissioners in Las
Vegas revealed that the California
grouse populations are up in the north-
ern part of the State, but are down
in the Mono-Inyo Counties areas. Our
western Nevada populations are main-
taining a nearly stable level, but the
northeastern part of the State has
shown a drastic decrease, as has ad-
jacent Idaho south of the Snake
River. North of the Snake River,
Idaho's Sage Grouse population seems
to be holding its own. In Montana the
present population is more than 50
percent below the 1952 level, while

the Wyoming birds decreased from
1950 to 1953, but have shown a re-
covery this year. The Colorado Sage
Grouse population seems to be hold-
ing its own. The lack of uniformity in
population trends does not give much
credence to the cycle theory as per-
taining to our Sage Grouse. On the
other hand, it does not completely
dismiss it either, since spotty declines
preceding a general area-wide decline
is one of the characteristics of cyclic
behavior in the northern grouse.

We do know this much however,
that during the three decades since
1920, Sage Grouse seasons have been
generally closed all over the State dur-
ing the years ending in 6, 7, and 8, sug-
gesting periods of Statewide cyclic
lows during which the majority of
the counties believed it necessary to
close the season to protect the brood
stock. These periods, perhaps coinci-
dentally, coincide with the 10-year
periodicity of the northern grouse
cycle. Therefore, if our grouse are
cyclic we cannot expect any substan-
tial increase in populations before per-
haps 1957 and another period of
abundance in 1959, to perhaps 1962.
We can only hope that our native
Sage Hen are not cyclic and that the
population recovers sooner than 1957.

The wart-hog has the peculiar, but
practical habit, of entering its bur-
row home backwards. It is thus able
to rout out with its tusks any enemy
that attempts to follow it.

The seemingly heavy, unwieldy bill
of the hornbill bird is actually quite
light. The outer walls are thin but
strong and the insides are a network
of delicate, bony fibers.

Ques: Of what value is the com-
mon toad?

Ans: The common toad eats 10,000
garden pests a year. Its work is
worth about \$20.