

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

Form Bi-689

FIELD DIARY

Mr. E. A. Goldman

(Official title.)

Period, April 3 to May 5

1931
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April 3, 1931

Left Washington, D.C. 7:05 AM

April 4 Arrived Leticia, 2 PM

Left Leticia 4:45 AM

April 5 en route

April 6 en route

April 7

Santa Catalinas,

Deer ³ about 3 years old weighed

85 lbs. unskinned and 69 lbs. skinned

Left Leticia about 9:00 AM

with ~~Winn, D. A.~~ ~~Shoemaker,~~ ~~L. B. Hart~~ ~~Karschner,~~ ~~and~~ ~~Mr. Amerson.~~ ~~Hornbrook~~ Fred

Winn, D. A. Shoemaker, L. B. Hart

Karschner, ^{and} Hornbrook for

Inter Ocean Ranch, ^{owned by} where we arrived for

dinner. In afternoon a trip by auto

was made to the top of the Santa

Catalinas in the vicinity of

Soldier Camp and Summer Haven.

Forage for deer. Destructive

growing of madroño, manzanita,

Apr. 7 con.

Quercus hypoleuca, mountain
mahogany, white fir, Gambel
oak, dogwood, Aspen, snowberry,
~~and~~ Garrya ^{at least} ~~and~~ Quercus
upper ^{slopes} the extent of browsing
decreasing on middle slopes in
brush. Some cliff rose also observed.

Apr. 8, From Inter Ocean on
Kinnison Ranch made a long trip over
the ~~north~~ northern slopes of the
Santa Catalinas, working up into the
lower part of the yellow pines.
About 24 white-tailed deer were
noted. In several places several
deer were seen together. Extensive
browsing ^{by} of deer of plants noted
yesterday was evident on the middle
slopes, gradually diminishing lower
down.

From Inter Ocean on
Kinnison Ranch
Apr. 9, Another trip over
part of northern slopes of Sta. Catalinas.

Apr. 9. con.

returning to ranch about 3 P.M. Prepared a brief report and Musgrave and I drove to his place near Phoenix arriving shortly before midnight.

Apr. 10. Phoenix to Pine Flat, 20 miles south of Williams by auto arriving shortly before dark.

Apr. 11. Pine Flat

Made horse trip over ranges south of Pine Flat, working down under the rim to Sand Flat about 6 miles south of Pine Flat.

Dipodomys. - loose
Holes in sand found by disintegrated sandstone near Sand Flat.

Forage. This is yearlong range for mule deer and cattle and many shrubs are hard hit. Among these are the oak brush (*Quercus turbinata* according to

Apr. 11 con packyphloea and
Muscgrave, Juncus ^{monosperma},
Leucanthus greggii montani wahogaryi,
Taraxacum wrightii, Arctostaphylos purpurea
(smooth-leaved), cliff rose, a gray-
hairy-leaved manzanita is little
known. Grass, including much gramma
in good condition.

Sand Flat. Had lunch at a
cabin at Sand Flat about 26
miles south of Williams. This
is well down in the pinon and
juniper belt with cactuses,
abundant in a loose sandstone
formation and abundant holes
of kangaroo rats. Some of
these in open ground along the
trail just north of the house
and others in the loose soil
about clumps of bushes. A
good place for general collecting.
Arctostaphylos. Two species other

Apr. 11 con.
along some of the ridges.
Forage, a little Philadelphus
heavily browsed noted near
Sand Flat. In this general
section heavy browsing of
Rhamnus crocea noted, also
some browsing of yellow pine
apparently by deer.

Apr. 12 (Sun), Pine Flat
to Flagstaff.

Another ride out from
Pine Flat and conditions similar
to yesterday noted. Drove to
Flagstaff in evening.

Apr. 13 (Mon), Flagstaff
to Hwy R.D. on Coconino Nat.
Forest.

Observed a few bunches of ^{antelope} Yucca,
usually numbering eight or 10
together, south of Lehavy Pass
on Anderson Mesa.

Apr. 13 con.,

Antelope, have increased rapidly in Anderson Mesa in past few years and are estimated by Muzzgrave and others to number around 3000.

Grass browsed by antelope:

Juniperus monosperma,

Phacelia trilobata

Yucca arizonica

Chrysothamnus

Gutierrezia (sage weed),

Cactus (2 species of joints)

Below Bly R.S. for some distance ~~with~~
down to cliff rose rather ~~very~~ ^(me) ~~open~~

Apr. 14. Bly R.S. trip
through canyon near Hay Lake
and clear creek,

Antelope, Saw several small bunches numbering up to 8. Most of the antelope are rather scattered the ♀'s probably preparing to fawn. Most or perhaps all

Nasua, Nichols reports
seeing skin of one
killed on Sycamore Ck,
25 mi. SE of Wilhams.

Apr. 14 am.

of those seen were bucks. One
found dead had apparently
been killed very recently by
^{some} predatory animal. Coyotes
had cleaned the skeleton, but
stomach contents found were
still moist. This was a ♀.

Ranger Smith and other local
forest officers estimate the
number of ~~deer~~ antelope in this
general section at 2500 to
3000. Antelope said to
shed corn sheaths in November.
Apparently there is urgent need
of some reduction of antelope
to save undue destruction
of forage.

Forage for antelope. Heavy
browsing of some junipers noted
and others markedly apparently
untouched, Chrysothamnus. Heavily

Apr. 14 con.

and destructively browsed, some of it being killed in some places but not so much in others.

Gutierrezia, leonurus sp. is apparently considerably browsed, but not killed.

Pentstemon, a small species browsed.

Ribes. Heavily browsed.

Elk. A few along Clear Creek and vicinity, feeding on golden willows and red leonurus.

Leonurus Faust

Apr. 15 (Wed.), By R.R. to Wallace, R.S. Setgreaves Faust, Ariz. via Winslow.

Drove to Winslow and in afternoon out to Wallace R.S.. Late in afternoon visited Willow Creek canyon a few miles from

Apr. 15 con.

Wallace R.S.

Elk. Abundant signs of elk wintering in willows along canyon and a few fresh tracks seen. Elk said by forest officers to be increasing, and over considerable territory.

Forage for elk, Along Willow Creek canyon we found considerable browsing of willow, tremas (red), Populus (black cottonwood), rose, box elder and raspberry. While this browsing is not so very ^{now} serious, where we observed it ~~now~~ Mergrove says it is more extensive than last year and it is clear that the number of elk should be checked.

Apr. 16 (Thurs), Wallace R.S.
Sitgreave Nat. For. Made a trip by auto past Jovi Doran Ranch south

Apr. 16. con

to within about 5 miles of rim where we became stuck so many times we were forced to turn back and returned via Dye Ranch.

Elk. Many signs of elk were seen and it is apparent they are numerous and generally distributed wintering well down among the pinyons and junipers. Deer are fairly abundant but elk more numerous.

Forage. Destructive browsing of large willows noted at Daran Ranch and Wolf Ranch. Cliffs rose browsed by elk but not destructively.

Wild turkey. Evidently in good numbers. Many signs seen especially where they are feeding in meadows near ranches. Four turkeys seen near Dye Ranch.

Apr. 17 (Fri) Wallace R.S.
Another trip by auto!

crossed Willow Lk. and on to
Fairchild Canyon and to Guntay
cabin where we stopped for lunch.

Beek. Numerous tracks seen ^{generally} distributed
Forays. Along Willow Lk. noted
browsing of crataegus in addition
to browsing observed on first visit.
Along Fairchild Canyon considerable
browsing of willow many of the
willow clumps have been browsed
and have started many sprouts
which are bitter off. Some clumps
of willows have died especially
in the drier situations or along
the edges of meadows where the
water table has undoubtedly
fallen. Some erosion of meadows.
Aspen reproduction being browsed
probably by both elk and deer.

Apr. 17 con

Near Promontory Tower and the river generally there is little evidence of extensive browsing by elk or deer. A good many small aspens are nipped probably by sheep.

Elk. Herds seen at Promontory Tower but few are now ranging on river. About half a dozen seen by the party.

Wild Turkey. Signs seen in abundance in the meadows near every old ranch up to within a few miles of the river. Several turkeys seen by our party today.

State Game Refuge. Here embraces a little over 22 sections of the Nat. Forest land.

Chimaphora - Mesquite
says sheep do not eat
it much. Entirely browsed
by antelope.

Grass on heavily grazed
sheep ranges such as we came
through today outside of
Sitgreaves forest juniper
is not noticeably browsed.

Apache pine, Mesquite
stems not palatable to
deer.

Apr. 18 (Sat.) Wallace R.S. to
Hiber, via Window & Holbrook.

Stopped en route in juniper
belt near Willow Creek and Cabin
Draw.

in juniper
Deer abundant near Willow Crk,
& Cabin Draw. A good way all
back. Signs of wintering. A few
said to remain even in summer
in juniper.

~~in juniper~~
~~Deer~~. In juniper belt eat feed
on mesquite and break down
juniper to get it. ~~to browse~~

Chamaebatiaria. Feed upon to
some extent apparently by deer.
Fresh stems cut off and fresh
deer tracks beside ground bush.

Mt. mahogany. Slightly browsed
probably by sheep near Willow Crk,
but also fed upon by deer -
a preferred species
at Hiber in autumn

Cliff Rose - stock in general
do not browse it much.

Apr. 19 (Sun) Heber R.S. to
Holebrook via ponds on Setpeaves Ranch.

At Willow Ranch good willow
palates ~~like~~ browsed. Many
fresh tracks elk feeding in
meadow largely on fresh grass
and clover.

Turkey. No signs at Willow
Ranch.

At Hawk Ranch many
elk tracks in rye field where
~~they evidently~~ come out at
night. Rye ~~also~~ considerably
grazed.

Apr. 20 (Mon.), Holbrook to
Blue P.O., via Luna, N.M.

Lunch with Lions Club at
St. Johns. Arrived at Blue, P.O. in
evening. Saw Julius Becker in
Springville and discussed deer
situation with him.

Apr. 21 (Tue), From Blue
R.S. rode slopes of mountains
along western side of canyon
and lower slopes of hills on
eastern side.

Mule deer. Range in summer
high up and in winter on
middle slopes which are summer
range of whitetail.

Whitetail deer. Range in
summer on middle slopes of
mountain the southern exposures
and ridges covered with a
rather dense growth of oak,
juniper and up mahogany.

Apr. 21 con
~~Apr. 27 (Tue) Blue P.O.~~

General area heavily browsed
in part by domestic stock but
few cattle or other stock
now far from river.

~~Deer~~ ^{common}
Deer. White tail on lower
slopes.

Male deer. Numerous in upper
part of juniper-juniper belt
which is winter range.

Mt. Mahogany. Heavily browsed
in part by stock especially
cattle now being browsed by
deer.

Juniperus park. Some being
browsed as high as deer can
reach.

Apr. 22 (Wed.) Another
ride from Blue R.S. over
slopes along western side of
valley up to near the top -
well up in Transition zone.

General area heavily
browsed by deer, few ^{stems} ~~stems~~
now but formerly many and
considerable erosion has
resulted.

Elk, Saw signs of a few
near top, number

Mule deer, a few ranging
up to near top where there
is snow in patches, apparently
feeding upon grass and other
herbaceous vegetation.

General conditions much as
in area covered yesterday.

Juncus pauciflorus. This is the
common sp. and the one most

Apr. 22 con.

heavily browsed, Deer do not browse the very young jumping so much as the older trees ~~which~~ many of which are cropped as high as a deer can reach. This is probably due to the more coarse prickly leaves of the younger growth.

Wt. Mahogany, This is perhaps the favorite browse of deer in this section. It has been heavily browsed by deer stock in the past and is much of it now being killed by deer.

Garrya, Browsed by deer but not so extensively as mahogany.

Alfalfa. In small fields in bottom of valley whitetails come in at night in numbers

Apr. 22 con.
making well worn trails
under barbed wire, many
entering at the same point.
Wire about 15 inches from
ground.

Apr. 23 (Thurs.), Mound
from Blue R.S. to Cooper Ranch.
Heavy rain last night but
partially clearing today.

Made trip in afternoon over
slopes to east of Cooper
Ranch.

Whitetail deer. Area visited
this afternoon is whitetail deer
range open for three years.

Mr. Cooper says ~~a~~ considerable
hunting has been done, but deer
evidently not so abundant
as near Blue, especially on
lower slopes.

Apr. 23 con.

Parry, area east of
Hooper's like most of general
territory has been heavily
browed in the past but
cattle but is less utilized
by deer than area near
Blue. It shows some deer
browsing, but this is
confined mainly to higher
slopes.

Apr. 24 (Fri.). From Hooper's
a long dog ride through basin of
Little Blue toward Alva, NM,
over Blacktail deer range.

Blacktail deer. In Little Blue Basin
blacktail are common or fairly abundant
in an area where mp. mahogany and
Garry, ~~are~~ and ^{to a lesser extent,} Felicitaria caribata
are browsed. Slopes are largely
open and thinly covered with
brush. A few whitetails also on
parts of the area near the Blue.

Apr. 24, con

Forage, Area visited today heavily overbrowed by cattle in the past and now being browsed by both deer and cattle the ground area being a yearlong range for both cattle and deer. Area badly eroded.

Apr. 25 (Sat.). From Leopold's Ranch rode general area on both sides of K. P. Creek. Riding up ridges on the ^{south} west side we struck the Govt. trail under the rim, crossed K. P. canyon on it and then rode down by trail on north side.

Whitetail deer, While not very extensively abundant at present deer were very numerous in the area covered today.

Forage, Area covered today is summer and winter range for

Apr 25 con.

whitetail deer, the line being near the boundary between Transition and Upper Sonoran zones. Many deer use the winter range to a considerable extent in summer, and conditions are ~~now~~ less satisfactory on winter range. In general area deer line can rarely be seen and much of the range is ~~in~~ probably in better shape now than when ^{most of the} cattle were removed ~~most~~ four to five years ago. Situation is not critical now but may become so in near future.

Apr. 26 (Mon.) Cooper Ranch to Springville, Ariz.

Apr. 26 con.

Climbed up along Grant Lk and turned up on right through Paradise a large flat canyon with yellow pines. Found a small stream, a branch of Grant creek.

Cornus stolonifera. Red willow ~~found~~ ^{lately} by deer.

Returned through Paradise and turned north running the mountain finally dropping into upper end of Foots Creek canyon along which we returned ~~near~~ to Blue R. S. ~~camp~~ mainly by the Foots Creek trail.

Whitetail deer. Saw at least 14 a number of these in yellow pines in the Paradise area and along the upper part of Foots Lk.

Forage. Gen. utilization of mt. mahogany, Garrya, Ceanothus fulviflorus, Cornus stolonifera, and other shrubs

Apr. 26 con.

But juniper ~~is~~ and manzanita,
the latter not very abundant,
not heavily browsed. As in
other sections utilization of
forage in this area is
not at present very serious,
but threatens to become so.

~~Blue R.S. to~~

~~Apr. 27 Springerville,~~

Apr. 27. Springerville, Arizona.
At Springerville preparing report.

Apr. 28. Springerville, Ariz.
to Magdalena, N.M.

Finished report and left
Springerville about 2 P.M. with
D. A. Shoemaker by auto and
arrived Magdalena, N.M. about 7
P.M. - Roads very wet and slippery.

Apr. 29. Magdalena to
Albuquerque by auto and left
in route to Denver.
Left ~~Albuquerque~~ ^{Magdalena by auto} about 8.30 A.M.
and arrived Albuquerque about
noon. Continued from albu.
by train to Denver about
4.30 P.M.

Apr. 30. Denver, Colo.
Arrived about 10 A.M. & attended
Predatory Animal and Rodent
Control Conference.

May 1 - 2 - at Denver.

May 3 - Left Denver on
the "Columbine" for Chicago and
Washington
3.45 P.M.

May 4 ~~en route~~
Arrived Chicago 7:45 P.M.; left
Chi. 8:30 P.M.

May 5,
Arrived Washington, 4:40 P.M.
~~Had~~

Year
Dinner 10 A.M.

" 10 A.M.

John Gilbert,

[Faint handwritten notes, possibly "P. ..."]

Game Preserve S. of Williams 135000
150000 a.
Game Preserve on Leatation, 90000 a.
" " " Blue 501000 acres.

R.A. Nichol, Univ. of Calif.

22 elk liberated on Campbell
Blue, Feb. 1927.

K.B. Kartchner, State Game Com.

Phonix.

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Find R.K. Stewart
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Annual Paper

Stewart says he found
red fox hair in
feces in coyotes

✓

Halls Refr,

Some believe coyotes carriers of
rabies.

Amazement at the evidence of
lack of knowledge of field
on return and the apparent
willingness to accept impossible
criticism as demonstrated truth.