

Official copy
Mr. Knight

Frederick
Journalist College
Bristol, Dorset
May 6, 1944

Dear Aldo:

I have been trying for days
to find time to ~~write~~ you a
letter but maybe ~~it~~ ^{can} be made to some
use.

In short, I am ^{entirely satisfied} ~~by~~
by the division of function between
my paper and Kabato's that you
propose in the fourth and fifth
paragraphs of your letter of
April 28. This had been my
first choice all along, ~~and I had~~
~~only made my suggestion~~
~~of April 17 as the best alternative~~
but I had felt from our previous
exchanges of views that it
~~was~~ did not meet with your
favor. My suggestion of
April 17 was only the best
alternative that came to me.

Without going into
details, I will say that ^{some} ~~it~~
certainly did fail to get
across to you what I meant
in my ~~previous~~ correspondence
and conversation ~~as~~ relating
to the use of Kabato's data.
What I had in mind was

undisturbed diligent and ingenious campaigning without being brought under more than partial control (Mohr, 1933; Floer, 1937).

The success of these animals in maintaining their numbers as well as they do despite the human pressure they bear is usually ascribed chiefly to their fecundity, ~~which is often overestimated.~~

But prolific that muskrats may be, they are also adapted, within limits, to a ~~semi-aquatic~~ existence without being wholly helpless on dry land or necessarily without effective alternative courses of action in the event of crises of adverse environmental changes (Arrington, 1939).

~~arrington~~ ~~is of the opinion that the muskrat's ability to eat on occasion very hard things is to some degree offset by its lack of a major asset in survival.~~

~~Muskrats are large enough and strong enough to drag~~

For the procuring of food alone,

~~the procuring of food alone~~
 these animals have adaptations that are doubtless a ^{over a considerable part of their} major asset in survival in normal life. They swim and dive expertly and, while submerged, dig or gnaw loose the rootstocks and other underparts of marsh vegetation and ~~may~~ may burrow extensively in all but the more resistant soils. Their incisor teeth are tools with which they may cut down sand bar willow (*Salix longifolia*) growths up to an inch ~~20 mm~~ in diameter or gnaw through ice and frozen mud (Swington, 1939a). Adults are large and strong enough to drag overland for hundreds of feet such objects as ears of corn (*Zea mays*).

~~Continue~~

Go on with test

~~very limited~~ indeed
very modest reference (with
full credit ^{for anything} being given) to
~~a~~ such ~~an~~ ~~important~~ points as
absolutely could not be ignored
without cheating the readers;
and more than anything
else I wanted to see
Kabato's data to ^{exam} ~~make~~ ^{make} ~~sure~~ ^{or}
~~that he did not have anything~~
~~that would make any~~
~~not be~~ ~~have~~ ~~disputed~~ ~~one~~
~~might~~ ~~be~~ ~~disputed~~ ~~one~~
~~something~~ ~~or~~ ~~disputed~~ ~~one~~
~~that would~~ ~~make~~ ~~any~~ ~~disputed~~ ~~one~~
~~make~~ ~~any~~ ~~disputed~~ ~~one~~

In the latter connection,
you should ~~have~~ ~~in~~ ~~begin~~
consider ~~mind~~ that I had ~~hardly~~ to
slightest idea of the scope
of Kabato 1943-74 investigation.
Now that I know that
his conclusions were mainly
based upon his bonding
studies, I should be able
see quite readily what is
safe ground for me to cover.
~~and~~ As matters stand, I
wonder in fact must never
not to see Kabato's data (other
¹⁹⁹³⁻⁷⁴ ~~the~~ ~~have~~ ~~statistics~~ ~~that~~ ~~I~~ ~~already~~
~~have~~ ~~until~~ ~~after~~ ~~the~~ ~~manuscript~~
~~has~~ ~~been~~ ~~prepared~~ ~~and~~ ~~put~~ ~~in~~ ~~your~~
~~hands~~).

TABLE - COMPUTATIONS IN AN EFFORT TO APPROXIMATE MIDSUMMER TO EARLY WINTER LOSS RATES OF PRAIRIE MUSCIE BOBWHITES, 1930-43, FOLLOWING ~~THE~~ TRENDS SHOWN CHIEFLY BY SOUTHERN WISCONSIN DATA FOR 1931*

Year	Spring density, both sexes (actual figures)	Spring density, hens (basis: 42.3% average sex ratio)	Hens bringing off broods (80% basis)	Young hatched (basis: 13.6 per average full hen)	Young alive by mid-summer (basis: 30% loss in first 3 weeks)	Adults alive by mid-summer (basis: 10% loss since spring)	Total birds alive by mid-summer (adults + young as calc.)	Early winter density, mixed ages (actual figures)	Percent decline of population ^{decline of population} of midsummer ^{midsummer} population by early winter
1930	112	47	38	517	362	101	463	257	44%
1931	236	100	80	1088	762	212	974	400	59%
1932	290	123	98	1333	933	261	1194	406	66%
1933	339	143	114	1550	1085	305	1390	433	69%
1934	288	122	98	1333	933	259	1192	411	66%
1935	196	83	66	898	629	176	805	416	48%
1936	70	30	24	326	228	63	291	145	50%
1937	45	19	15	204	143	41	184	163	11%
1938	39	16	13	177	124	35	159	138	13%
1939	97	41	33	449	314	87	401	318	21%
1940	133	56	45	612	428	120	548	273	50%
1941	142	60	48	653	457	128	585	264	55%
1942	122	52	42	571	400	110	510	353	31%
1943	70	30	24	326	228	63	291	233	20%

* The reader should be emphatically cautioned against too-literal acceptance of figures derived from ~~prorata basis~~ (see text).

Rule of thumb 4.1 times spring density gives close to midsummer figure - use this in calculations

taken by employees of the Des Moines Waterworks Supply Grounds — notably by Messrs. Ben Ballyler, Lee Simmons, and Martin Haines, and made available through the courtesy of Mr. A. F. den Boer, ~~and of~~ ~~supplementary~~ ~~value.~~

of Mr. A. F. den Boer, are of ~~particular~~ supplementary value.

The Bob-white, as a species having (within limits) sedentary and gregarious tendencies (Hodder, 1931; Evington and Hornstrom, 1936), may be rather ~~readily~~ easily counted under winter conditions often prevailing in north-central United States, but the validity of population figures may be affected by lack of tracking censuses, by imperfectly ~~aggregated~~ ~~aggregated~~ movements of birds in and out of ~~of~~ areas the boundaries of observational areas, by interruptions of local censuses necessitated by more urgent demands of work elsewhere, and by undetected losses as from ~~the~~ poaching. Hence, when, for any reason, the tabulated data ~~are~~ are believed to be of less than