

What date?

~~Wm. Fisher~~

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WATERFOWL SURVEY - Washington and Oregon, West of the Cascades.

1933

Local Habitat and Concentration Areas

In western Washington the areas frequented by migratory waterfowl of game species are, roughly distinguished, limited shore reaches of Puget Sound, Gray's Harbor and Willapa Bay, the north bank of the Columbia, and numerous, small interior lakes. Some of the more suitable and favored locations serve not only as feeding and resting grounds for the migrating flocks, but as winter rendezvous for ducks and geese from the farther north and as nesting habitat for certain species; the Mallard only, perhaps, in any great numbers.

Concentration of waterfowl in the shooting season is mainly on the deltas of the Skagit, the Dungeness, and the Nisqually rivers, and on the lakes and sloughs of the Columbia's meander flats in the near stretches below old Ft. Vancouver. Other delta locations are too insignificant to be attractive or, in two or three instances, are now occupied by city settlement. The numerous lakes west of the Cascades are mostly small and of glacial origin, in depressions that have, in many cases, little or no extent of tule flats.

In western Oregon the heaviest concentration of migratory waterfowl is in the slough country between the channels of the Willamette in their lower course and the Columbia as it makes northward forty miles or more in its progress to the sea. This concentration area is continuous with but more extensive than that on the Washington side of the river. On the other hand, the low lying deltas of the Oregon coast are small by comparison with those of Washington, and the smaller bays - Tillamook, Netarts, Yaquina - have more limited numbers of migratory waterfowl that stop enroute or winter there. Late fall rains greatly increase the fresh water areas on the lowlands, especially in the Tillamook country, and enhance their value

as shooting grounds. The same is true of the interior, Willamette valley, to which ducks resort in considerable numbers in the rainy season.

Species and Numbers

Wild geese may not be rated as much of a sporting asset in the western part of Washington and Oregon. Migration lanes of the Canadian geese are mainly east of the Cascades, the resting and feeding grounds in the grain fields north and south of the Columbia river. Along the Sound we have usually only the Snow Goose (Chen hyperboreus), in some winter concentration on the Skagit delta near Stanwood, and the Black Brant (Branta nigricans), up along Blaine Bay well toward the Canadian border. Brant also winter in limited numbers in some of the smaller inlets of the coast.

Four species of ducks occur westerly in any considerable sporting numbers. These are the Mallard (Anas platyrhynchos), the Pintail, or Sprig, (Dafila acuta), the Widgeon (Mareca americana), and the Green-winged Teal (Nettion carolinense). A fifth species, the Scaup (Bluebill), probably mixed flocks of both Marila marila and Marila affinis, concentrates in winter in a few favored bays of this coast. Large bags of this bird were reported only from Oak Harbor, in Puget Sound. It is considered by some as a "trash duck", so far as its table qualities are concerned. Relative numbers of other species that are less common will appear herein in the count of such birds as reported by the shooting organizations.

In the early part of the shooting season the greater numbers of the birds that fall to the gun in the Washington shooting districts are very generally considered to be locals, mostly Mallards, with a smaller representation of early south-bound migrants. Among the latter are Pintail and Teal in growing concentration through the season, and later the Widgeon predominates. It does not appear to the sportsmen that many birds enter the coast flights of Washington from the inter-

ior-northern nesting grounds. This fact, if it shall be established as a fact, would make for the creation of a coastal zone in the seasonal regulations, instead of a zoning by parallels alone. Accurate information on which to base such conclusions is lacking because of very meager banding records. Such as we have in the Pacific Northwest are from the cooperating stations on the Canadian side - at Ladner, Chilliwack, and Pitt River, British Columbia, and a small, volunteer station near Nehalem Bay, Oregon. And this banding is restricted largely to migrating ducks, trapped in winter concentration, rather than younger birds handled on the nesting grounds. Oregon coast flights receive a larger share of ducks from the interior through migration down the Columbia waterway.

Available Food Supplies

The natural food conditions have, of course, largely determined the migratory stops and concentration areas of the waterfowl through the years. But in the districts under our investigation we have taken into account, also, the additional food supply provided by agriculture and the natural supply eliminated by adverse factors.

In all three of the delta areas of greatest waterfowl concentration in western Washington much of the land has been diked to shut off salt water inundation particularly at times of greatest stream flow. Outside the dikes is a tule zone with such food plants as bulrush (Scirpus sps.) and sedge (Carex sps.), and in the shallow water an abundant growth of eelgrass (Zostera). Back of the dikes in the Skagit region alone was a green volunteer growth this season of about thirty-five thousand acres in oat and pea stubble - not an agricultural asset, but excellent duck food. The Dungeness district, on the northeastern front of the Olympic peninsula, is a dairy country with both diked and irrigated lands. Ducks wintering here,

in addition to their recourse to the natural food supplies of the coast, have access also to meadows and pastures with temporary ponds and to a limited acreage of alfalfa stubble. No specific complaint of damage to agricultural interests has come to our attention from this district. The Nisqually delta is the smallest of the three under consideration and has little in the way of agricultural production to supplement the natural food supply for waterfowl. Farming has not proven very profitable and the dikes have fallen more or less into disuse.

*Food supply
Columbia*

The lower Columbia region, on both the Washington and the Oregon sides, has a hard luck story to tell with respect to natural food conditions for waterfowl - a scourge of introduced European carp that has laid waste the tules and wapato (Sagittaria) once flourishing in the sloughs and lakes of the lowlands. Offspring of the pest is distributed over the pond areas at each succeeding June rise of the Columbia, making it impracticable to restock the waters with duck food plants or to grow long season crops on the lands immediately adjacent. The result: cattle cropping close to the water's edge on one side, carp on the other - nothing for the ducks.

There is much food for ducks from agricultural sources "up state" in Oregon, along the Willamette valley towards Corvallis and Eugene; but the birds are not inclined to drift up that way until later in the shooting season, when the depressions have been filled with the winter rains. On the coast the bays and inlets are small compared to those of Washington, the Tillamook country furnishing the most duck forage from agricultural sources. It is a dairy country of low, evergreen meadows and pastures, with not much land under the plow and no crops that can be injured by wintering ducks, unless one may class the feeding on natural grasses as injury.

Shooting Form and Practice.

Ducks sold on wing

Duck Clubs - Throughout western Washington and Oregon the harvest of ducks falls largely to these associations of hunters, whether loosely joined, as a private owner and his guests, a share-and-share alike group, or a purely commercial enterprise where ducks are sold on the wing. In the last named grouping a middle-man, not necessarily a shooter himself, acquires such land leases as he can control at a profit and sells the shooting rights by the season or day. In Oregon the prevailing rates for shooting are \$10.00 per day and from \$100.00 up for the season, depending upon the reputation of the place for concentration of ducks. Limits per day are sometimes guaranteed, whatever that may mean to the layman. In Washington seasonal rates are about the same as above but day rates run a bit lower. Sometimes fractional memberships are sold, entitling the holder to shoot in alternation with other holders of the unit privilege.

Obviously the commercial exploiter of wild life has the least to lose from rapid depletion of the natural resource, for this is but one of the productive enterprises in which he is engaged and if he doesn't reap the duck harvest now somebody else will.

Among these duck clubs, unfortunately, are some of a type that is organized neither for sport nor table supply, but for week-end outings in which duck hunting is but a secondary consideration. This sometimes leads to shooting without restraint of conservative judgment or regard for legal restrictions - it is bad for the ducks. The coming generation of enthusiastic young sportsmen stands to lose out also under such practices, for they are not usually taken to the club quarters with their elders.

Then, there are very many clubs of the better class, above reproach except by the legion of hunters on the outside - clubs where clean sportsmen shoot

shoulder to shoulder in the blinds with their sons or the neighbor's boy. These should save the day for the Club system in a form modified from that now existing.

*Free
Shooting
Privilege*
For the days of free public shooting seem to be passing with the open range and the homestead privilege.

There is this to be said in favor of waterfowl shooting under the club system as known on this coast; that the bona-fide farmer sometimes adds considerable to his revenue by leasing his marginal lands for the construction of ponds, quarters, and blinds, to be held as exclusive under trespass penalties. On the other hand, some of the clubs hold deeded lands which they improve and use any time of year for recreation or temporary residence. The commercial exploiter of waterfowl shooting also, in a few cases, has bought his duck ponds and other real estate outright. Whether some form of the ticket system which is being tried out in upland game hunting might be made to apply also to remunerate the farmer for his duck shooting, is a matter worthy of investigation. As things stand now, opinion at large registers strongly against the club's advantage of feeding and baiting.

*Clubs
Licensed*
Coming down to figures: In Washington, duck clubs are licensed by the state game service, paying ten dollars each per year to hold their shooting grounds against inclusion in any proposed game sanctuary. This plan makes for contact with each particular club, fixes responsibility for its activities, secures reports valuable to the service, and means regulation if amended shooting practices are to be put into effect. In Washington state 247 such shooting organizations were licensed this season, 1933. Of these, about 185 are in the counties lying west of the Cascades. Oregon has no such system of licensing duck clubs, and only a few more than fifty could be rounded up on the West Side for facts and figures. Membership in the Washington clubs, by official figures of 120 units reporting or contacted, totaled 762, averaging over six members per club. Forty-one Oregon

clubs contacted personally or replying to questionnaire, reported a total of 268 members with an average also of somewhat more than six. As the total number of hunting licenses issued to residents of western Oregon is around 30,000 (based on half the state average for the past three years) there is, among the sportsmen of the state in general, considerable resentment of club privileges by those who can afford to pay for them. In western Washington the sentiment expressed is very much the same, with figures for state hunting licenses at about 40,000 and County licenses at 30,000.

Feeding and Baiting - As practiced here, in the coastal zone of the Pacific Northwest, there is no sharp distinction between feeding and baiting the ducks, except that grain is distributed in the shooting ponds from ten days to three or four weeks before the initial day of the open season. It is the exceptional club (there are a few) that will put out grain after the close of open season, unless there is a critical time in duck affairs brought about by a freeze-up. This happens sometimes in the Columbia river district, more rarely along the salt-water coasts. But as only a few of the clubs have a keeper on the grounds after the season closes, the ducks are usually left to shift for themselves. And here is the rub: They sometimes hang dumbly about, expecting the dole to which they have been accustomed for two or three months, until many of them are too weak for sustained migratory flights.

*perish
the
birds*

Of course the main purpose of the pre-season feeding is to accumulate as large a flock as possible that will resort to the particular pond for breakfasts. Sometimes a flock of as many as two to three thousand is thus held for a time as semi-private property, to be thinned out on each successive shooting day. And the fellow who does not wish to afford the cost of an excessive amount of grain sometimes complains of his more prosperous rival, who can go the limit for the sport.

But there is another side to the feeding question. It is very generally reported that the in-coming ducks, from the North, are in poor flesh, with that fishy taste that comes from eating marine plant life of high iodine content. If this is a correct estimate of the situation (not verified), feeding liberally with grain will soon put the birds in better condition for the table and is a commendable practice, especially for the Columbia river district, where natural food is not to be had in abundance.

And there is still another phase of the feeding question to the fore: Each district in the north-and-south line of migration of the ducks is anxious to arrest and hold the birds as long as possible, lest they move on to the other fellows' guns - perhaps to the rice fields of California or into the game markets of Mexico. There is a current opinion, frequently and publicly expressed, that men are hired to shoot ducks at any time in the rice fields of the Sacramento Valley.

Feeding ducks as practiced in western Washington and Oregon merges into baiting on the first day of the open season; for the grain is put out within gun range of the blinds or other shooting stands. Wheat, usually, sometimes corn and occasionally oat or pea screenings, is trailed into the shallow water in more or less liberal quantities. Baiting is usually done in the early morning, so that birds which may have been disturbed by the keeper will have time to cool off and come back for breakfast by the time shooters are in the blinds. The decent thing of course, is to take birds as they circle in by small groups, with care to hit one hard and cripple no others. But, then, there are sportsmen and sporting men in a game that attracts all classes by its varied appeal.

Practically all the clubs bait the ducks, if for no other reason than to hold their own in the competition. The amounts of grain fed depend upon the strength of the club, in finances and membership, and the frequency with which the ponds

are "shot". It will vary from less than a sack to ten tons or more per club. 138 clubs reporting on this item in Washington gave a total of 420 tons, an average of a little more than 3 tons per club. In Oregon 41 clubs reported a total of 245 tons, with the average per club at 6 tons, or twice the Washington average.

The Toll of Ducks

In the short time allotted to this survey, it has not been practicable to gather information along this line from the army of potential duck shooters who hold a hunting license but are outside of any club organization. Perhaps the situation may be best expressed by an editorial appearing in a prominent daily of the Northwest, in which it was proclaimed that "Joe Doaks had got two "(ducks)", and he was lucky at that" Exactly! But would the ducks fare any better if the clubs were practically eliminated and the army of potential hunters took to the field? Very many of them have stayed at home, as things are at present. We feel for Joe, but how to reach him!

On the other hand the club shooter has not bettered his position by talking too much about the "Limits", assuming as he frequently does, his inalienable right to the legal bag per day or in possession. It is refreshing to meet the club member, not too often encountered, who is satisfied with a mess for the family table, and a bit of the heart of the day - recreation, bronzed skin, the thrill of a few keen shots; and maybe wet feet.

The toll of ducks seems to be heavy, too heavy under club shooting as now practiced. For there is too much waste, both of unretrieved cripples and in the bag. When the shooting is good, men stationed in the club blinds will more often not make any great effort to secure the cripples or far kills, at least until after the limit is thought to be reached. By then it is not practicable to

locate all of them and it is left to the keeper to do some field and beach combing at his leisure. And, not to the point however, the shooter has missed the fun of watching his dog work on retrieving the individual kills, though not all the clubs use dogs. Waste in the bag, too, we said! Who hasn't wondered, the layman, we mean, what use the club shooter can possibly make of the two dozen ducks he is often privileged to lug home from the week-end outing! Cold storage taken into account, it will be remembered that the best shooting grounds owned or leased by duck clubs in western Washington and Oregon are only a short drive from the larger cities. And many of the clubs shoot on Wednesdays as well as week-ends.

As a reflex of the baiting system, game protectors find it difficult to deal with illegal traffic in ducks for certain markets. The duck boot-legger finds it easier to beat the game under this system and get birds in quantity than if he had to resort to open country shooting, and safer than trapping.

Shooting ducks over their breakfast table is a practice of long standing here, indulged in notably by older business men of means. At its best it is the blue milk rather than the rich cream of sport. At its worst it is slaughter, as observed and reported on too many occasions. Its features that menace wild life may well be compared to the evils that have come to be in many another order of things long entrenched behind privileges which comparatively few are able to secure. Many club members feel that they have paid well for their shooting assets and should get their money's worth. Which, again, is bad for the ducks! And again we greet the rarer sportsman who feeds the ponds if need be, but shoots the passes and the fly-ways!

Figures covering the club shooting of waterfowl by species and totals, as nearly as we have been able to gather them in the field and from incomplete card return, are presented herewith for western Washington and Oregon. Some clubs kept records of totals only:

WASHINGTON

OREGON

Mallard	17,729	Pintail (Sprig)	3,227
Teal (Green-winged)	13,548	Mallard	2,190
Pintail (Sprig)	11,963	Baldpate (Widgeon)	1,582
Baldpate (Widgeon)	10,182	Teal (Green-winged)	1,552
Blue-bill (Scaup)	2,744	Canvas-back	403
Spoonbill (Shoveller)	654	Blue-bill (Scaup)	300
Canvas-back	517	Spoonbill (Shoveller)	81
Golden-eye (Whistler)	152	Ducks (unclassified)	2,859
Redhead	64	Geese (unclassified)	<u>25</u>
Ringneck	11	Total	12,219
Gadwall	7	This report covers the shooting	
Brant	94	of 20 clubs only (Oregon), all that	
Cackling Goose	37	replied to the federal questionnaire.	
Canadian Goose	13	Forty-one clubs, including some of	
Snow Goose	5	the above, reporting to the office	
Geese (unclassified)	38	of the Oregon State Game Commission,	
Ducks (unclassified)	<u>1,253</u>	returned a total kill of 22,682	
Total	59,011	ducks.	

It may be of interest to note that club shooters here averaged about the same bag in western Washington as in Western Oregon, rather under eighty birds apiece for the season in the former state and a fraction over that number in the latter. Shooting was considered good in the first part of the season, indifferent later, and poor at the last. The season was mild throughout, with no major storms but heavy rainfall in November and December.

Permanence of the Species

As to the decreasing trend, stationary continuance, or increasing tendency of the several species of migratory waterfowl on this Coast, the testimony is as conflicting as that of the alienists in a sanity trial. There is the burning optimist who contends that the supply of ducks is inexhaustible, which is absurd in the light of what has been in the history of other wild life. Then, the more rational estimator, more frequently met with, whose log of numbers is based on observed concentration at favorable times in a given area, not the field as a whole. He holds that shooting permanence is assured if adverse factors other than the gun are eliminated. The varmit is berated, and salt-water pollution, and drainage projects - as they deserve. But there is tacit admission in it all that the ducks are not holding their own. Finally the older fellow who gets around a lot and has seen the glamour of other days, will tell you that the ducks are slipping; too fast for comfortable contemplation. Among such observers are some of the game protectors or wardens who have noted the decreasing flocks of certain species in the passing years.

Incontestable evidence of the survey shows that there are now but four species of ducks on this northwestern coast that occur in sporting numbers, and of these the Mallard only is highly esteemed for the table. The others make good targets but do not grace the platter so largely or so appetizingly. The Widgeon (Baldpate) usually comes late and stays late, sometimes troubling the farmer in the wintering. Probably this species is more than holding its own, for it escapes the bombardment of the earlier part of the shooting season as now established, and is less attracted to the grain baiting than the others. The Pintail (Sprig) rafts up in goodly numbers on the bays of Puget Sound and the sea coast and comes over the blinds in satisfactory numbers when foraging. The Teal (Green-winged species) is here in abundance but seemingly erratic in its appearances in force in this, that, or the other locality.

Outside these four species, the Pacific Northwest has little to its account in the way of desirable ducks (sea ducks eliminated). Canvas-back, Shoveller, Golden-eye, and Redhead are taken only in small numbers and locally, as shown by the shooting returns. What they may have numbered in former years we cannot say, without adequate records for comparison. The Wood Duck, under protection is noticeably coming back, and is reported by wardens in fairly large flocks, at times, in the Columbia river, sloughs, and upstate in the Willamette valley.

Criticised Methods of Hunting

Other than cool and calculated censure of baiting in many quarters with warm defence in others, little in the way of criticism of hunting practices has come to our attention. Some objection to the inhumane use of decoys was voiced in the Oregon district. It was claimed that the decoys were sometimes so restricted in their freedom to come and go as to entail suffering from fatigue and exposure to rough weather. They are usually restrained from leaving the vicinity of the blinds, perhaps for an entire shooting day, by means of a tether attached to the leg or a ring on the neck. Such clubs as can arrange with a keeper to look after their interests the year around usually raise their own decoys. Twenty-five to the blind are permitted by the hunting regulations of Oregon. Washington has at present no restrictions on numbers of decoys.

There has been criticism of our policy of permitting the use of any type of shot gun, except as to gauge, while sportsmen to the north, under treaty cooperation with us, may use only single or two-shot arms. Repeating shotguns and pump guns are very popular in the duck blinds of the Washington-Oregon district, but check on numbers of these types as well as others was undertaken by another

branch of the service and not duplicated in our survey. Apparently there is no prevalent use now of sink boxes or blinds in open water, though legal definition of a sink box is considered faulty by enforcement officials in Washington.

Suggestions, for What They Are Worth.

At risk of their being considered superfluous in a report, the following desiderata or convictions are presented: (1) An enlarged program of duck banding on nesting grounds to the north (Alaska), for better definition of the coast flights, their origin and fluctuations. (2) Investigations of duck nesting in western Washington and Oregon, with a look into the possibilities of artificial rearing of Mallards to supplement the wild flocks considered local. (3) Attempts to re-establish native duck foods or introduce others and to grow short-season duck food crops in the Columbia district, following the early summer flood stage in the river (millets, perhaps).

These things may be considered apart from any duck-favoring changes in the regulations, or other waterfowl measures with which this report is not concerned.

Respectfully submitted,

Associate Biologist.