INFORMATION SERVICE, UNITED STATES DEPARTMENT OF THE INTERIOR

WILDLIFE TIPS AND BRIEFS

A CLIPSHEET ISSUED MONTHLY BY THE FISH AND WILDLIFE SERVICE

Washington, D. C. RELEASE SATURDAY, MAY 30, 1942 Vol. 3, No. 5

NOTE TO EDITORS: With the war-time discontinuance of the Fish and Wildlife Service's press-release service, this clipsheet is its medium for providing the information requested by the press and outdoor writers.

RESEARCH REVEALS PARTIAL SUBSTITUTE FOR AGAR-AGAR

A partial substitute for agar-agar, seaweed byproduct formerly supplied almost entirely by the Orient, has been successfully prepared at the College Park (Md.) Technological Laboratory of the Fish and Wildlife Service, United States Department of the Interior.

The announcement was made recently by J. M. Lemon, who is in charge of the laboratory.

"When spread of the War made impossible further imports of 'agar'," said Lemon, "we began investigations with other products of marine plants as substitutes. One substance, prepared from the giant kelp, was found to be satisfactory for substitution of about half the agar used in laboratories for bacteriological cultures. That is, the culture media can be prepared and used successfully in which half the agar has been replaced by a trade product made from kelp."

"While not the final solution," according to the technologist, "this may mean the equivalent of doubling the present stock of agar used in bacteriological work, which use constitutes by far the greatest demand for it."

The results obtained by the Service scientists are being verified in the laboratories of other Government agencies before detailed information can be released. Research will be continued for other substitutes which may be used to replace agar entirely.

Once imported in greatest bulk from China, Japan, Ceylon, and Malaysia, agar is the commercial name applied to the dried, gelatinous extract of certain species of red seaweeds. It is used, for example, in the manufacture of "vegetable" isinglass capsules, tungsten wire, and paints, as well as in culture media for bio-chemical research and bacteriological control. During the last war it was successfully used in the treatment of wounds.

Agar is supplied to the drug trade in dry, transparent flakes, and these are reduced to a coarse powder for medicinal use. It has the property of absorbing many times its weight of water and retaining it; and, in medicine, in addition to being tasteless and indigestible, has the additional property of resisting the action of intestinal bacteria and of digestive juices.

ANGLERS SPEND $12,000,000 FOR 8 MILLION LICENSES IN 1940-41

Devotees of Izaak Walton paid $11,617,841 for 8,004,034 anglers' licenses during the 1940-41 season, according to a tabulation recently released by the Fish and Wildlife Service, United States Department of the Interior. Of this total, 7,151,754 were resident licenses and 852,280 were for nonresidents, including aliens.

Compared with the previous year, the 1940-41 total indicates an increase of 145,759 licenses, says Guy W. Lane, of the Service's Division of Federal Aid, in Fishery Leaflet 7, "Anglers' License Data for the Year 1940-41."

Michigan topped the list with 773,228 licenses issued to anglers. Ohio ranked second with 714,342, followed by Minnesota with 696,426; Indiana, 505,773; New York, 458,669; Illinois, 417,923; Wisconsin, 408,125; Pennsylvania, 390,791; Missouri, 347,245; and California with 245,895.

New York, however, exceeded all other States in the fees paid for licenses with $963,171. Michigan was second with $796,001. Other high-ranking States included Wisconsin with $725,395; Indiana, $664,099; Minnesota, $617,546; Pennsylvania, $596,797; Washington, $572,181; California, $499,681; Missouri, $476,705; and Oregon with $383,532.

Reports from all the States were as follows: Alabama received $46,103 for 40,934 licenses; Arizona $61,256 for 23,316; Arkansas $90,684 for 44,335; California $499,681 for 245,895; Colorado, $255,289 for 150,214.

Connecticut $149,437 for 38,798; Delaware $8,188 for 3,243; Florida $93,260 for 37,848; Georgia $28,749 for 22,568; Idaho $250,627 for 115,355; Illinois $327,383 for 417,923; Indiana $664,099 for 505,773.

Iowa $275,605 for 223,325; Kansas $112,200 for 111,516; Kentucky $75,153 for 84,940; Louisiana $47,541 for 38,896; Maine $217,567 for 128,370; Maryland $33,500 for 26,970; Massachusetts $273,566 for 124,813; Michigan $796,001 for 773,228; Minnesota $617,546 for 696,426; Mississippi $30,070 for 23,160; Missouri $476,705 for 347,245; Montana $212,597 for 102,052; Nebraska $136,849 for 103,088; Nevada $20,223 for 12,826; New Hampshire $231,665 for 93,440.

New Jersey $192,949 for 73,033; New Mexico $85,398 for 31,249; New York $963,171 for 458,669; North Carolina $108,566 for 62,381; North Dakota $12,039 for 24,009; Ohio, $364,180 for 714,342.

Oklahoma $141,008 for 136,718; Oregon $383,532 for 118,359; Pennsylvania $596,797 for 390,791; Rhode Island $13,571 for 12,985; South Carolina $16,331 for 15,605; South Dakota $59,375 for 58,141; Tennessee $221,467 for 131,329; Texas $80,520 for 85,446; Utah $130,106 for 56,068; Vermont $108,507 for 67,337.

Virginia $250,202 for 145,123; Washington $572,181 for 230,985; West Virginia $367,415 for 179,356; Wisconsin $725,395 for 408,125; and Wyoming with $193,574 for 67,586 licenses.

IRISH MOSS INDUSTRY IS BOON TO MASSACHUSETTS

Collecting "Irish moss," or carrageen, along the Massachusetts coast has developed into a boom industry since war has cut off imports, says the Fish and Wildlife Service, United States Department of the Interior.

The value of the State's production of this seaweed jumped from $59,000 in 1940 to more than $100,000 in 1941. In 1939 it was only $24,000.

A gelatinous submarine growth, carrageen, after drying and bleaching, is used in the manufacture of pudding, pharmaceutical supplies, skin lotion, and in several hundred industrial processes. In powder form, it is used in manufacturing beverages, paints, shoe blacking, medicine, confectioneries, and ice cream.

Since 1847, when carrageen was discovered in Massachusetts, Scituate has been the ranking moss-gathering center in the United States, although Lynn, Nahant, Gloucester, and Quincy also participate in the industry.

Mossers today still find that the collection methods and type of equipment used by their grandparents are adequate, according to a 4-page leaflet on "The Irish Moss Industry of Massachusetts" recently issued by the Service. Processing, marketing, and selling practices also are described.

GAME IN U. S. REPLACES MEAT TO FEED ARMY OF 5 MILLION 77 DAYS

The 435,000,000 pounds of wild game and game fish taken annually in the United States replace enough beef, poultry, commercial fish, and other meat to supply an army of 5,000,000 men for more than 77 days, according to W. E. Crouch of the Fish and Wildlife Service, United States Department of the Interior.

Crouch, who is chief of the Service's Division of Game Management, estimates that the American sportsmen's annual take of game animals, game birds, and game fish adds up to 435,000,000 pounds of food. Applying this reduction of civilian uses of domestic meat to the army's needs, he used a daily meat allowance of 18 ounces per soldier, as reported by the Quartermaster Corps.

Food values of game, Crouch points out, are over and above the recreational values for which the resource is normally managed. Wildlife, he says, plays an important part in peace-time recreation and should also play an important role in relieving the strain on people who are waging a war.

"There are more than 900,000 big-game animals, including deer, elk, moose, and antelope, killed in the United States each year," says Crouch. "At an average of only 90 pounds each, dressed, these represent about 81,000,000 pounds of meat.

"It is estimated that during the last year 15,000,000 waterfowl, 20,000,000 rabbits, 15,000,000 upland game birds, and more than 4,000,000 other small game were killed, which, averaging only one pound each dressed, would supply an additional 54,000,000 pounds of food.

"This makes a total of 135,000,000 pounds of meat in game animals and birds, to which can be added the game fishes taken to replace meat needed in our war effort.

"There are more than 12,000,000 sport fishermen in the United States, and it is conservatively estimated that each of these will catch on the average more than 25 pounds of fish per year. In fact, information available shows that the average catch is above 30 pounds in many States; in California it is known to exceed 50 pounds. However, on the basis of an average of only 25 pounds of sport fish annually for each fisherman, there is supplied in this country each year 300,000,000 pounds of game fish.

"Altogether this adds up to 435,000,000 pounds of food available from the annual harvest of game animals, game birds, and game fishes."

WILDLIFE ADAPTS ITSELF TO WAR ACTIVITIES ON REFUGES

Wildlife in general is showing a remarkable ability to "take it" under the war conditions now prevailing, reports the Fish and Wildlife Service, United States Department of the Interior.

Observations by refuge managers and other field employees should dispel fears that wildlife refuges and concentration spots are being needlessly devastated by military action, says Albert M. Day, Service official. Out of 100 such reports received, only 42 included observations on war activities and these indicated almost unanimously that wildlife on the refuges, as elsewhere, is not suffering from war activities.

As liaison officer for wildlife Day has followed closely the negotiations which gave the Army and the Navy use of some million acres of national wildlife refuges.

"The need for large tracts of isolated lands is clear, considering the gigantic scale of war preparations," he commented. "These 'for-the-duration' transfers in no instance involved highly developed wildlife areas, but they did help meet the pressing need for immediately available maneuvering grounds and target sites, and they avoided costly, time-consuming land acquisition."

"Since these transfers involved areas of comparatively low wildlife value and wildlife has shown a surprising adaptability, the major interests of conservation are protected," he said.

Day pointed out that the military branches have been "exceedingly cooperative" in sparing areas of high wildlife value.

"On occasions," he said, "the Army abandoned its plans to use certain wildlife concentration areas when objections were raised by administrators. Such cooperation spared nesting and resting grounds of the last remaining flock of trumpeter swans in Montana and the moose-calving grounds on Kenai Peninsula in Alaska.

"On the other hand," Day continued, "the wildlife people keep in mind the single purpose of helping to win the war. That makes for progress."

BALDPATE SUBJECT OF NEW 1942 DUCK STAMP

The design of the 1942 "duck stamp," which must be purchased by all migratory waterfowl hunters over 16 years old, has been taken from a dry-point by A. Lassell Ripley and features the widgeon, or baldpate, reports the Fish and Wildlife Service, United States Department of the Interior.

Ninth in the annual series, the new stamp will be placed on sale at all first- and second-class post offices on July 1.

Mr. Ripley's design shows a pair of widgeons at the edge of a coastal marsh, with a second drake coming in to join them.

Since first issued in August 1934, the duck stamps have become familiar to wildfowlers, philatelists, and conservationists through the country, says the Service. About twice the size of a special delivery stamp, they cost $1 each and may be purchased singly, in blocks, or in complete sheets of 28 stamps.

Ninety percent of the money realized from the sale of "duck stamps" is used by the Fish and Wildlife Service to supplement other funds for the purchase and maintenance of waterfowl refuges throughout the country. The remaining 10 percent is used for printing and distributing stamps, administrative purposes of the Migratory Bird Hunting Stamp Act, and other Federal activities for migratory bird conservation.

674,000 FISH SUPPLIED FOR DEVELOPING PONDS ON FARMS

For stocking fish ponds on farms, 674,000 fry and fingerlings were supplied during 1941 by the Fish and Wildlife Service, United States Department of the Interior, to the Soil Conservation Service for distribution to cooperators, according to a recent report.

Largemouth black bass, sunfish, crappie, catfish, and warmouth bass were the favored species in the program of the two Federal agencies to provide a new farm crop and an added food supply. In many southern States, particularly in Alabama, thousands of farm fish ponds are now in operation.

"The feasibility of pondfish culture on this basis has been demonstrated fully, and ample quantities of fish for home use are today being propagated in established ponds on farms," states M. C. James, Acting Chief of the Fish and Wildlife Service's Division of Fish Culture.

At the outset, he explains in a pamphlet on "Propagation of Pondfishes," the main object of the amateur farmer fish-culturist should be food production for home use. After conducting work for several years on a limited scale, the farmer can decide whether to extend his operations and raise fish for the market.

The present program, it is pointed out, is emphasizing use of natural water areas that are neglected and in many cases even unsightly. Artificial ponds, however, may likewise be used for fish, and the same area can both produce fish and also serve such farm purposes as stock watering or irrigation.

GROUNDFISH LIVERS BRING GOOD PRICES

Increasing war-time demands for fish liver oils are reflected in prices paid for liver from groundfish--haddock, cod, pollock, hake, and cusk--at Boston, Gloucester, and Portland, reports the Fish and Wildlife Service, United States Department of the Interior.

In 1940 the average price per pound was 3 cents while in 1941 the average was 5 cents. During 1941 the price increased from 3.8 cents in January to 6.1 cents in December.

Quantities landed increased along with prices. In January 1940 they reached 338,000 pounds and in November 1941, 1,062,000 pounds. In December landings decreased somewhat owing to the decline in groundfish landings and probably to a decrease in the average liver weight.

"Livers have been saved on nearly all types of boats fishing for groundfish, including large, medium, and small otter trawlers and line trawlers, but the large otter trawlers provide much the greatest proportion of the supply," according to Wm. C. Herrington, in charge of the Service's North Atlantic Fishery Investigations at Cambridge, Mass.

During March, June, September, and December of 1941, large otter trawlers landed 466 groundfish trips at Boston and saved livers on 91 percent or 425, trips.

However, the quantity of livers landed during 1941 was nowhere near the total that might be obtained under the best conditions, according to Mr. Herrington who, in a 3-page pamphlet entitled "Potential Production of Ground fish Livers in New England," discusses the factors limiting production and outlines methods by which maximum liver landings can be achieved.

P.N. 188942

RABBIT RAISING BECOMES IMPORTANT IN WAR-TIME

Raising domestic rabbits is becoming more important as war-time needs for meat and fur products increase, declares the Fish and Wildlife Service, United States Department of the Interior.

Requiring only a small space, rabbits may be raised on farms, in back-yards, or on small lots, the Service advises. Hutches may be constructed of lumber and chicken mesh wire, materials that are readily available. In many cases, scrap lumber or crate material can be obtained.

Rabbit pelts, it is pointed out, are essential to the fur and felting industries which have been deprived by war conditions of materials formerly imported. Choice rabbit pelts are used for making fur garments and as fur lining or trim for other garments. The fur from the poorer quality pelts is used for making felts.

Rabbit meat is a quick meat to produce since only 90 days are required from mating time until the young are ready for market. Waste from the kitchen and garden can supplement the usual grain-protein-hay ration.

A moderately profitable enterprise or sideline, rabbit raising is however no get-rich-quick scheme, the Service warns and also calls attention to the need for caution against creating a nuisance in urban areas. Some towns, it points out, have restrictive ordinances which should be investigated.

The Fish and Wildlife Service maintains an experiment station at Fontana, Calif., where rabbit production problems are studied. Those interested in the station's home-food production program are invited to write to the U. S. Rabbit Experiment Station, Fontana, Calif.

FROZEN FOOD LOCKER CUSTOMERS POTENTIAL MARKET FOR RABBITS

For the rabbit breeder who is producing more meat than his family can consume, the Fish and Wildlife Service of the United States Department of the Interior suggests that frozen-food locker customers are a constant and dependable outlet for the surplus product.

There are 3,623 frozen-food locker plants located in 45 States, points out George S. Templeton, in charge of the Service's rabbit experiment station at Fontana, Calif. The plants rent family units that are readily accessible to the customer.

The quality of meats is improved during the storage period, says Templeto because ripening processes occur under proper refrigerating conditions.

Breeders interested in developing this market can obtain a list of locker customers in communities served by these storage plants, states the Service official.

LANDOWNERS IN TEXAS PROFIT BY LEASING HUNTING RIGHTS

Forty Texas landowners pocketed an average of $11.85 for each deer or turkey killed by hunters on their ranches during 1941, Pittman-Robertson technicians recently reported to the Fish and Wildlife Service. The landowners leased hunting rights on 87,592 acres in Kerr County for $9,226.75, and the sportsmen bagged 384 deer and 394 wild turkeys.

There were 2,275 deer killed on shooting preserves in 3 counties, exceeding all former records, the Texas Game, Fish and Oyster Commission said.

Studies of shooting preserves are being made as part of a general investigation of the white-tailed deer and its management in the Edwards Plateau of Texas, the Federal Government providing 75 percent of the funds under the Pittman-Robertson Act for Federal aid in wildlife restoration.

HARD IDAHO WINTER IS JINX TO INJURIOUS JACK RABBITS

Idaho's past severe winter gave predator and rodent control agents their best opportunity in years to carry on an extensive program for controlling jack rabbits which annually cause thousands of dollars' damage to crops, reports the Fish and Wildlife Service, United States Department of the Interior.

Weather conditions caused the bunching of the rabbits in brush areas on ranges and around ditch banks and haystacks in agricultural sections.

L. Doyle Mathews, Service agent at Idaho Falls, reports that the fur buyers in that locality handled more than a million and a half of these rabbit skins.

"Owing to a fairly high market for rabbit furs, a great number of private hunters, farmer boys, and others were out on the range after rabbits to get their pelts," advises Agent Mathews. "Dried furs sold all the way from 4 cents to 18 cents apiece, and a good many rabbits were sold before they were skinned, the purchaser skinning rabbits and curing the skins and disposing of the meat principally to fur farmers for feeding fur animals."

In addition to rabbit control work, Service hunters took 1,997 predatory animals-114 bobcats, 1,876 coyotes, and 7 mountain lions--in Idaho during the first three months of 1942.