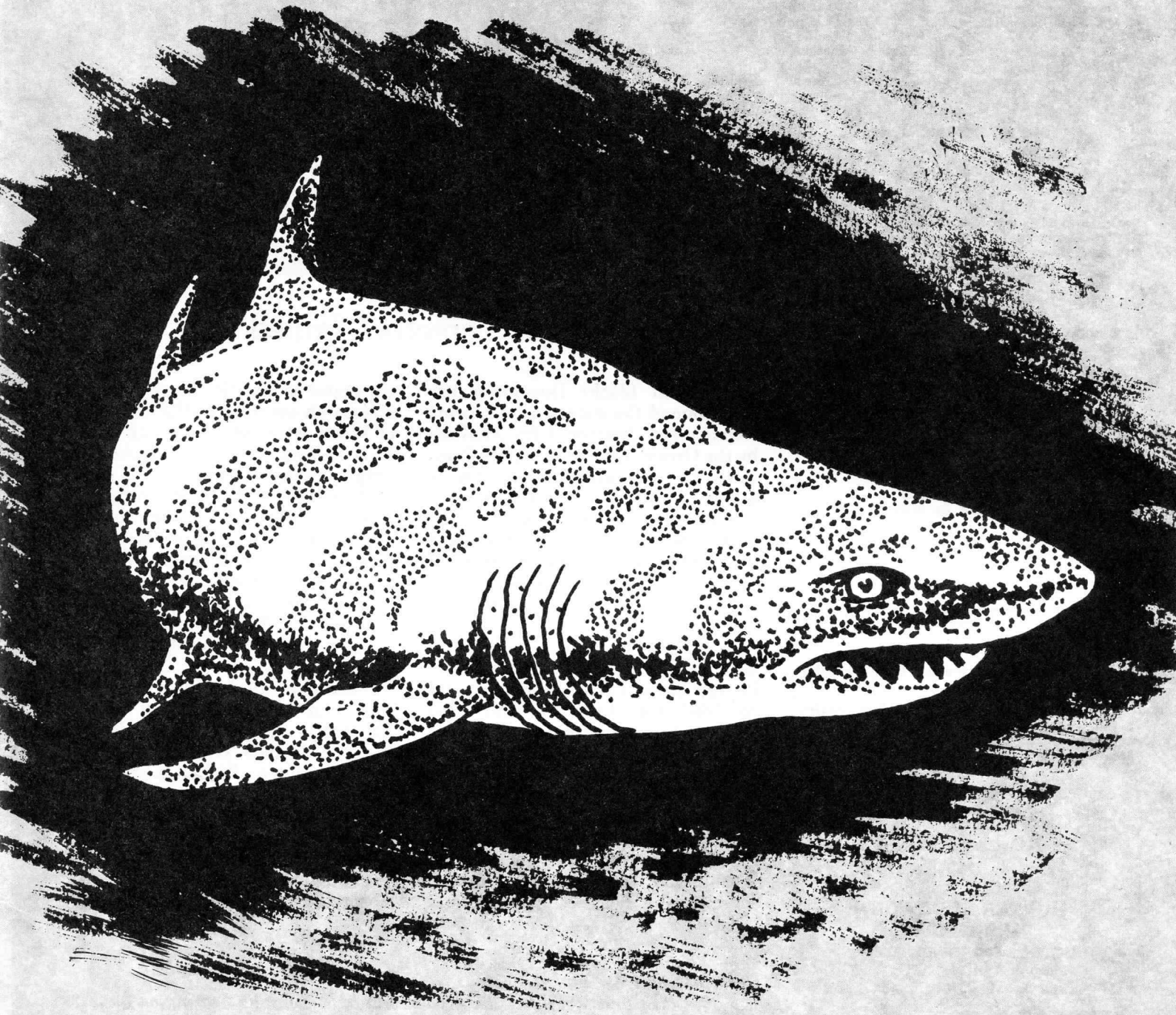


OREGON WILDLIFE

JUNE 1976



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RON E. SHAY, Editor

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Portland, Or. 97208

The Cover

SHARK! For more about Oregon sharks, see the feature article

Artwork by Harold C. Smith

HUNTER EDUCATION PROGRAM

INSTRUCTORS APPROVED

Month of April	14
Total Active	1,538

STUDENTS TRAINED

Month of April	584
Total to Date	230,955

HUNTING CASUALTIES REPORTED IN 1976

Fatal	0
Nonfatal	4



New Director Named

Dr. John (Jack) Donaldson has been named the successor to retiring Department director John McKean by the Oregon Fish and Wildlife Commission. Following a nationwide search and the interviewing of a number of applicants, the Commission chose Donaldson as best qualified to handle the complex job of directing the newly merged agency. He will take over the position on August 1.

Dr. Donaldson was born in Montana in 1929 but has spent much of his life in the Pacific Northwest. He received his BS, MS, and PhD degrees in fisheries from the University of Washington. During the 1951-52 academic year he was a Fulbright scholar in fisheries at the University of Oslo in Norway.

After the year in Norway, Dr. Donaldson worked for 11 years for the Washington Department of Game, serving as a fisheries biologist and

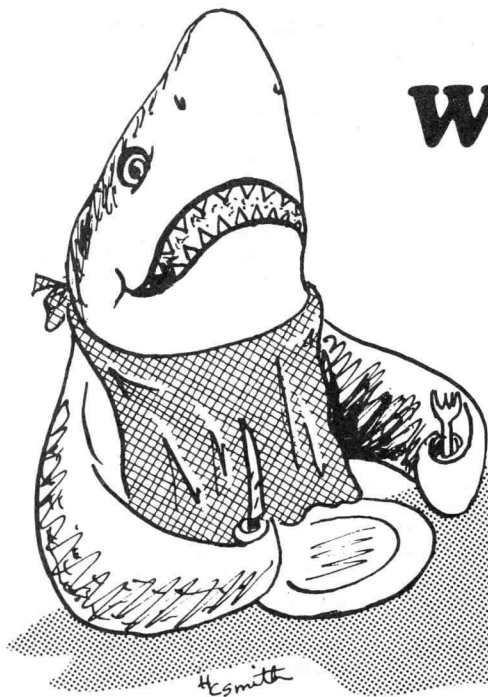
then later as aquatic chemist. He was a research assistant at the University of Washington while working on his PhD degree and then moved to Oregon State University as an assistant professor of fisheries. During his nine-year tenure there he was promoted to associate professor.

In 1972 the newly named director started Aqua-Foods, Inc., a commercial fish farming operation adjacent to Yaquina Bay. Dr. Donaldson's summer experience while a student included work with the Oregon Fish Commission, the National Park Service, and as field assistant for the University of Washington in the Marshall Islands. He is a member of the American Fisheries Society, American Institute of Fishery Research Biologists, Pacific Fishery Biologists, American Society of Limnology and Oceanography, and the International Association of Theoretical and Applied Limnology.

Commission Hearing

The Fish and Wildlife Commission will hold a public hearing on June 22 starting at 9:30 a.m. at the Portland headquarters, 1634 SW Alder Street.

Under consideration will be the continued closure of the commercial fishery below John Day Dam with some new information to be presented, a private hatchery permit review for Weyerhaeuser's Coos Bay site, and an informational review of the Columbia River shad fishery with data on new experimental gear. Other routine business will be conducted at the meeting. □



WHO'S going to eat WHOM?



by C. Dale Snow
Ass't Marine Regional Supervisor

Who is going to eat whom, might well be the question being asked when man and shark face each other. Both have been known to dine on the other; however, man more frequently dines on shark than shark on man.

The book/movie "Jaws" in 1975 created an ocean full of man-eating monsters in the eyes of the public and caused an unknown amount of economic damage to coastal communities of the United States by scaring visitors away from the beaches. The publicity attendant with the movie "Jaws" brought to the surface man's long-standing fear of anything that can or will eat him. It is particularly abhorrent to man to consider that he might be the entree of some creature's menu. There is good reason to avoid certain species of sharks and there are others that should be treated with respect. The near hysteria created by "Jaws" and the reports that the bodies of two boating accident victims near the Columbia River had shark bites on them has caused some Oregonians to ask how much danger is there in Oregon of being attacked by sharks.

There are at least 12 species of shark that have been reported as being in Oregon waters. These 12 species appear in Table 1, along with notes on reported sizes, food items, and my assessment of their danger to man. It is my personal opinion that any shark as big or bigger than I am is one to be treated with respect, unless it is a filter feeder such as the basking shark. Sharks that are considered harmless can and will inflict painful wounds if speared or brought into a boat. The shark, like the banana, has no bones and when brought into a boat, twists and thrashes its body about, snapping and biting anything that it can. This trait is *not* shared with the banana! This is one distinct danger that fishermen face. Even though sharks don't brush their teeth with a well known commercial toothpaste containing fluoride, they never have a dental problem. The shark, unlike other animals, has several rows of triangular saw-edged teeth. If one gets broken off a new one moves up into place and the shark has another full set of dentures.

The majority of the large sharks

found in Oregon waters tend to stay well offshore and away from the areas frequented by bathers and scuba divers. On occasion they will be seen in shallow water near shore. One small salmon shark was killed by a razor clam digger in the surf near Newport and the spiny dogfish can be found from near shore to over a hundred fathoms (600 feet). This is the most common shark in our waters; however, its small size makes it harmless unless you put a finger in its mouth to remove a hook.

The most dangerous shark that has been reported in Oregon waters is the white shark. Fortunately, rarely does this animal stray into Oregon waters. These occurrences coincide with the movement of warm waters up from the south and extend nearly to Alaska. It is also during these warm water intrusions that the blue shark becomes most abundant off our coast. There is some controversy over the danger of this animal. However, a blue shark reportedly was the cause of a swimmer's death in San Francisco Bay. Identification was made from the bite marks on the swimmer's

Table 1. Sharks known to occur in Oregon waters, size, food and author's evaluation of danger to man¹.

Common Name	Scientific Name	Maximum reported size	Food and Feeding Habits	Danger to Man ²
Sixgill shark	<i>Hexanchus griseus</i>	26 feet (793 cm)	Fishes and crustaceans.	Little or none.
Sevengill shark	<i>Notorhynchus maculatus</i>	8+ feet (244+ cm)	Fish including other sharks.	Fights back if disturbed; in captivity will attack when unprovoked. Caution advised.
Thresher shark	<i>Alopias vulpinus</i>	25 feet (762.5 cm)	Herring, anchovy, pilchard, frequently stuns prey with tail.	Not known to attack man.
White shark	<i>Carcharodon carcharias</i>	16-36 feet (488-1098 cm)	Human swimmers, sea otters, seals, and other large animals, as well as smaller fishes such as salmon, hake, rockfishes and crabs; will attack small boats.	Extremely dangerous, Rare in Oregon waters ³ .
Basking shark	<i>Cetorhinus maximus</i>	30-45 feet (915-1372.5 cm)	Small crustaceans screened from the water by highly developed gill rakers.	Harmless ⁴ .
Leopard shark	<i>Triakis semifasciata</i>	5 feet (152.5 cm)	Small fishes and crustaceans.	Harmless normally. One known attack.
Salmon shark	<i>Lamna ditropis</i>	10 feet (305 cm)	Salmon, sculpin, tomcod, voracious feeder.	Caution advised, Potentially dangerous.
Brown cat shark	<i>Apristurus brunneus</i>	2 feet (61 cm)	Not listed, probably small fish and crustaceans.	Harmless.
Soupfin shark	<i>Galeorhinus zyopterus</i>	6+ feet (183+ cm)	Pilchard, anchovy, squid, salmon, rockfishes, viviparous perches.	Probably harmless, size would indicate caution.
Blue shark	<i>Prionace glauca</i>	12-25 feet (365-762.5 cm)	Salmon, lanternfish, pomfrets, saury, squid; sluggish except when feeding.	Implicated in a swimmer's death in California. Caution advised.
Pacific sleeper shark	<i>Somniosus pacificus</i>	25 feet (762.5 cm)	Voracious & versatile feeder, rex and Dover sole, salmon, halibut, seals, octopus, squid, crabs, rockfish and carrion.	Caution advised.
Spiny dogfish shark	<i>Squalus acanthias</i>	5+ feet (152.5 cm)	Wide variety of fish and invertebrates.	Harmless.

¹Other sharks may be found in Oregon waters that the author is unaware of.

²Classification, except white shark, is subjective and reflects only the opinion of the author.

³Reported in California, just north of Columbia River and Vancouver Island. It is assumed that these animals came through Oregon waters.

⁴Harmless refers to undisturbed animals. Any animal being disturbed, harassed or otherwise molested, though normally harmless, can or will bite to defend itself.

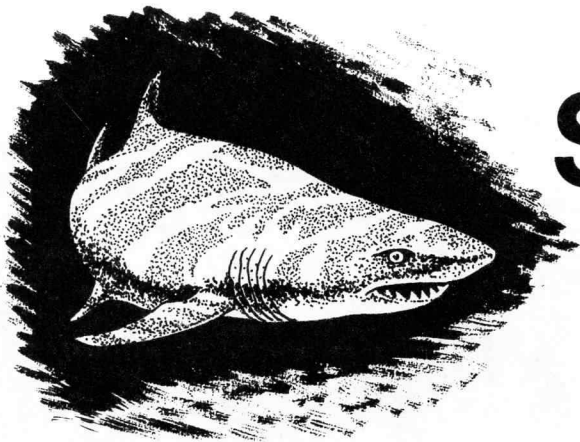
body. Its size alone is reason enough to treat it with much respect. The sevengill and sleeper sharks should also be given a wide berth.

Scientists estimate that sharks have been around for a quarter of a billion years and will probably be around for many more years. This, contrary to the thinking of many people, has not all been bad. Commercial shark fishing was a major fishing industry from 1931 through 1946 when they were caught for both food and vitamin A that was extracted from the livers. The two principal species that were utilized were the soupfin and the spiny dogfish. The spiny dogfish made up for in numbers what it lacked in size. Both species were suffering from overfishing around 1946 and stringent regulations were

being considered to protect the species. However, this never became necessary. The advent of synthetic vitamin A virtually eliminated the market for shark liver and both species, without an intense fishery, made a rapid recovery. In fact the comeback of the spiny dogfish has been so successful that the Canadian government subsidized the price of dogfish shark in order to revitalize the industry and reduce the numbers of spiny dogfish in Canadian waters. A casual food fish fishery still exists in California for sharks and major fisheries exist in some foreign countries.

The International Game Fish Association recognizes sharks as being gamefish. Seven species of shark appear in the I.G.F.A. book of world

record fish. Three of the seven species — blue, thresher and white—occur in Oregon waters. It is assumed on the basis of reports of the white being found north of the Columbia River and Vancouver Island that it also could be found in Oregon waters. However, if you catch any of these species on sport gear and are interested in a record, you would have to beat the following weights in the All Tackle Class (130 pound test line): (1) Blue shark, 410 pounds; (2) thresher shark, 739 pounds; and, (3) white shark, 2,664 pounds! There are of course, records for men and women in the 6, 12, 20, 30, 50, and 80 pound test line classes in accordance with the International Game Fish Association rules and regulations. Sport fishermen in Oregon are passing up



SHARKS

OF OREGON COASTAL WATERS

2 ft.



BROWN CAT SHARK

Apristurus brunneus

3-5 ft.



LEOPARD SHARK

Triakis semifasciata

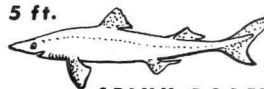
8+ ft.



SEVENGILL SHARK

Notorynchus maculatus

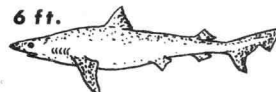
5 ft.



SPINY DOGFISH

Squalus acanthias

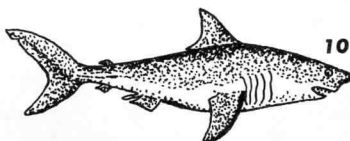
6 ft.



SOUPFIN SHARK

Galeorhinus zyopterus

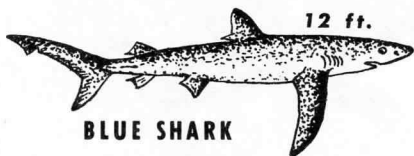
10 ft.



SALMON SHARK

Lamna ditropis

12 ft.



BLUE SHARK

Prionace glauca

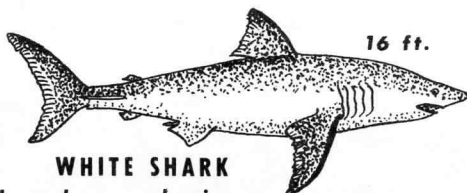
15 ft.



SIXGILL SHARK

Hexanchus griseus

16 ft.



WHITE SHARK

Carcharodon carcharias

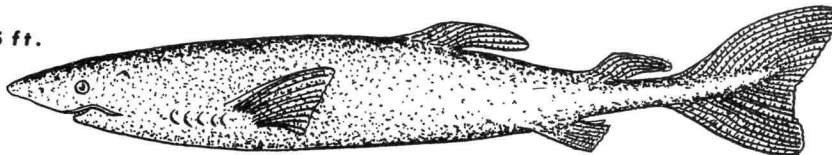
13-16 ft.



THRESHER SHARK

Alopias vulpinus

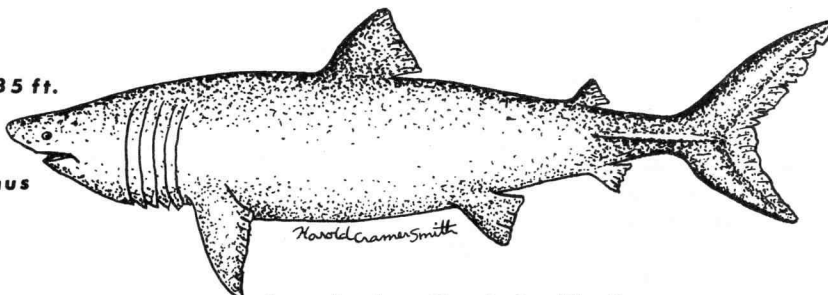
20-25 ft.



PACIFIC SLEEPER SHARK

Somniosus pacificus

30-35 ft.



BASKING SHARK

Cetorhinus maximus

Harold Cramer-Smith

approximately to scale

lengths for North Pacific Ocean

an opportunity to set a world record for shark by not fishing for them. You are probably saying by now, "Why would I want to catch a shark?" There are several reasons: (1) reportedly, shark are an exciting fish to catch; (2) you might get into the world record book; and, (3) many species of shark are good to eat. Of the 12 species of sharks in Oregon, 7 species, the six and sevengill, thresher, leopard, soupfin, blue, and dogfish are all edible. In fact, during World War II, grayfish and butterfish were marketed and people liked it; however, when the Food and Drug Administration said the processors had to call it "shark", the market disappeared! Shark meat properly prepared tastes very much like other popular fish and is similar to swordfish in texture. It is boneless because sharks have a cartilaginous skeleton similar to the sturgeon. Shark meat, like skate, should be soaked overnight in salted water to remove the hint of ammonia in the flesh. For the adventuresome, here are two shark recipes that were tested and published by the U.S. Bureau of Fisheries.

Oven-Fried Shark

- 2 pounds of soupfin or other shark fillets
- ½ cup milk
- 1½ tbsp. salt
- 1 cup fine bread crumbs
- ⅓ cup cooking oil

Wipe fillets with damp cloth and dry thoroughly. Add salt to milk and stir until dissolved. Dip each fillet first in milk, then in bread crumbs, and lay in a greased shallow baking pan. Top each layer of fish with the cooking oil, and bake in a preheated oven at 375° F. for 25 minutes.

Shark Chowder

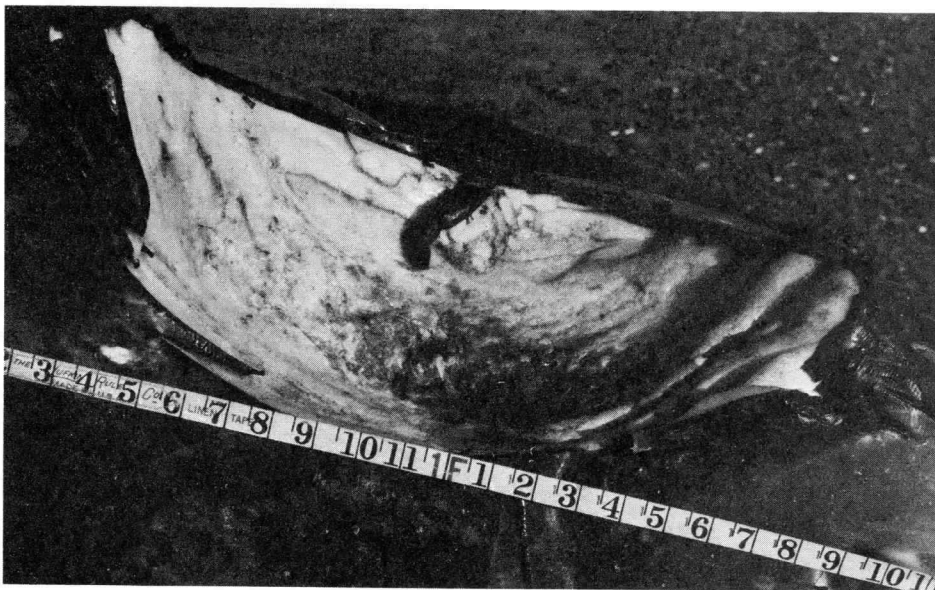
- 2 pounds shark meat
- ½ pound salt pork
- 2 small onions
- 1 qt. sliced raw potatoes
- 1 qt. milk
- salt and pepper to taste
- few sprigs of parsley

Wash the shark thoroughly, cover with cold water, and boil until tender. Flake the fish or cut it into small pieces. Save the water. Cut the salt pork into small pieces and fry until



Upper photo shows a 40-foot gray whale killed by a ship's propeller and washed up on the beach near Tillamook earlier this year. Sharks chewed on the tail stock area of the

animal. Arrow points to large bite shown close up in the lower photo. Photos courtesy Bruce Mate and Robin Brown, OSU.



crisp, then remove the pork scraps. In the fat fry the sliced onions, then add the potatoes and a little parsley and cook until done, adding a little water if necessary. When potatoes are soft, add the hot milk and flaked fish, salt and pepper, and heat through. Split Boston crackers or pieces of pilot bread may be placed in the chowder, or served with it.

Shark can also be smoked the same as any other fish and makes a perfectly acceptable product.

In summary, I would say that *the chance of being attacked by shark in*

Oregon is very small unless you go out of your way to spear or harass one or unless the ocean is unusually warm. Caution should be exercised around all sharks and if you see sharks, get out of the water as quietly as possible. Frantic movements may bring on attacks. Some shark specialists theorize that these frantic movements constitute a threat to the shark so it attacks. I personally think that such movement might suggest an animal in distress and invites attack. So, the next time you go fishing in the ocean and you see a shark, say, "Hey, I am going to eat you!" That's who's going to eat whom!

This and that

compiled by Ken Durbin

Waterproof Your Coats and Hats

As any "dried-in-the-wool" outdoor person knows, wet clothing must be avoided. Accordingly, the following procedure for waterproofing cloth merits consideration.

1. Buy two ounces each of alum and lead acetate. The former sells for about 10 cents an ounce, the latter for about 35 cents.
2. Boil each chemical in a gallon of water separately, then combine the solutions in a large container that's easy to clean.
3. In about an hour a precipitate will settle to the bottom of the container. Take the liquid off the top and place in another container. Discard the bottom settlings.
4. Dunk the cloth you want to waterproof in the solution, squeezing and sopping until it is well soaked. This should be done for about five minutes.
5. Drain the cloth, squeezing gently if you wish, but do not wring!
6. Hang to drip dry. When finally dry, the garment will be waterproofed.

Colorado Outdoors

*

Guide To Pesticide Use

PESTICIDE DO'S & DON'TS is a leaflet reprinted from an article in the March issue of *Audubon* magazine. It begins with the message that between 80 and 90 percent of pesticide use in homes and gardens does no good at all; says pesticides can be a hazard to humans, pets, and wildlife, and often cause more pest problems than they solve. Single copies of the leaflet are free from National Audubon Society, 950 Third Avenue, New York, New York 10022; in quantity, \$5 for 100.

Missouri Conservationist

*

Quick Fix

We are all aware, or should be, that discarding monofilament fishing line on the banks of fishin' holes or into the water is a practice detrimental to wildlife. But, is there some useful purpose to which these tangles of "plastic hair" can be put? You bet there is, if you have a leaky boot, wader, tent, or tarp. Melt some monofilament line and smear the drippings over the leak. If the hole isn't too big, you will have made an instant, waterproof seal that will last as long as a standard patch. Just keep your fingers out of the hot, gooey stuff when you melt old line, or you may suffer some mild burns—or seal your hand!

Outdoor Oklahoma

*

Reward Stems From Eagle Conviction

A Michigan farmer will become \$1,000 richer on June 26, when he receives reward money from the National Wildlife Federation and Michigan United Conservation Clubs for his role in supplying federal wildlife agents with information leading to the May 3 conviction of two Michigan men for killing a bald eagle.

Rudolph Vanderwal, 58, of Lake City, has been named the sixth recipient of the NWF \$500 reward under a program established by the nation's largest conservation education organization in 1971 as a deterrent to illegal eagle shootings. In addition, he will receive \$500 from the MUCC, the NWF Michigan affiliate.

*

Pay The Price

Given the choice, six out of ten Americans believe "it is more important to pay the costs involved in protecting the environment than to keep prices and taxes down and run the risk of more pollution", according to a recent nationwide poll by the Opinion Research Corporation. Also, 88 percent agreed "we are paying now for the pollution we have caused for many years" and 90 percent agreed that "if we don't start cleaning up the environment now, it will cost more in the long run."

Texas Parks & Wildlife

*

Conservation Stamps

The National Wildlife Federation, the nation's largest conservation education organization, pays a special Bicentennial tribute to American wildlife in its new 1976 Conservation Stamp series.

The stamps feature full-color paintings of 36 animals and plants that have played an important role in America's history and development.

To display the stamps, the Federation also has printed a Conservation Stamp album which tells the story behind each subject illustrated on the stamps, a practice inaugurated by the NWF in 1939.

The wildlife stamps traditionally have been a prime fund-raising tool for the nonprofit, nongovernment conservation group. Last year, contributions from wildlife and nature lovers to the stamp program raised more than \$500,000 to finance educational activities.

To be placed on the mailing list for the Bicentennial Wildlife Conservation Stamps, write Dept. 2076, National Wildlife Federation, 1412 - 16th Street NW, Washington, D.C. 20036.

*

On The Value Of Tidal Marshes

Tidal marshes are often viewed as areas with immense esthetic value but little economic worth, except as possible development sites. Two ecologists and an economist now have come up with a more instructive look at the value of marshlands. Led by Eugene P. Odum, head of the Institute of Ecology at the University of Georgia, the scientific trio evaluated a number of previously unquantified aspects of marshes. The results show the following values per acre of marsh: commercial and sport fisheries, \$100; aquaculture potential, \$630; tertiary waste treatment potential, \$2,500; and life-support value, which includes ability to absorb carbon dioxide, produce oxygen, support wildlife, and provide storm protection, \$4,100. The total value far exceeds the going price of an acre of rich farmland in the midwestern breadbasket.

Audubon econotes

□

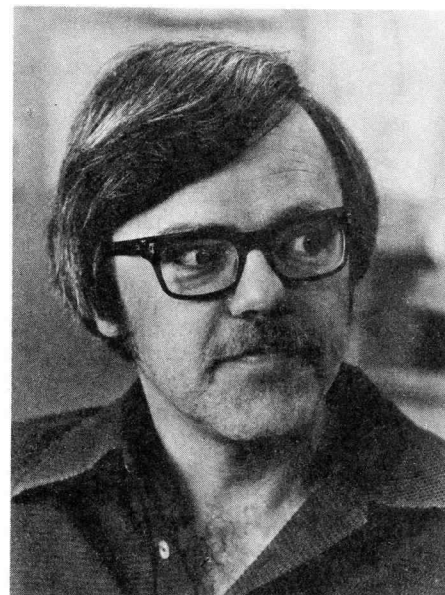
Employees Receive Awards



Bob Penington



Dave Heckerroth



Burnie Bohn

Shikar-Safari Award

Each year the Shikar-Safari Club International, an organization of professional hunters and wildlife conservationists, presents a Wildlife Officer of the Year Award to a deserving recipient in each of the states. This year Bob Penington, wildlife conservation technician working out of the Bend Regional Office of the Department, received the award for Oregon.

Bob has been with the Department for over 20 years, working in two other locations prior to assignment in Bend. In his position, Bob is called upon to utilize a wide variety of talents including those of a welder, carpenter, mechanic, law enforcement officer, and designer of special equipment, to mention but a few. He is known as one of the most versatile individuals in the Department. The Shikar-Safari Award recognized his capable, dedicated, and dependable service for the Department.

American Fisheries Society Awards

The Oregon Chapter, American Fisheries Society, selected Dave Heckerroth as the recipient of the annual award for outstanding contributions to the fisheries field in 1975. Dave is the district fishery biologist stationed in Tillamook. His work within the community led to his selection to serve as the current chairman of the Tillamook County Planning Commission.

Dave's concern for the protection and enhancement of fish and wildlife habitat has been shown by his accomplishments in working with private and public land managers. He has been instrumental in organizing the Oregon Estuarine Research Council.

Dave served as the Oregon Chapter Director of External Affairs in 1975. His aggressive action at the national level of AFS was a major factor in the decision to develop a supplemental publication oriented to management type fishery work. □

Also, the Oregon Chapter awarded to Burnell (Burnie) Bohn an Award of Merit for 1975. The award states that as program leader for the Columbia River Investigations of the Department, Burnie has performed far in excess of the normal requirements. In recent years the management objectives of Columbia River anadromous fish stocks have undergone severe tests. Unprecedented economic, political, and social pressures have presented unusual obstacles in meeting responsible fisheries management goals. Throughout this period Burnie has maintained unwavering attention to his primary job — the management responsibility.

In numerous public hearings and court appearances, the award points out, Burnie has continued to press for reasonable management and conservation practices and has always spoken first for the resource. The pressures of his duties have steadily increased in recent months, yet Burnie continues to show outstanding professionalism in support of the fishery resources. □

Bright Colors Help Sort Out "Round-Trippers"

*Photos and story by
Bob Kuhn, Oregon Wildlife staff*

Since the 1930s, people have been counting the salmon and steelhead passing Bonneville Dam as these fish make their way upstream to spawn. These counts, especially in recent years, have become increasingly important and are used in conjunction with counts from dams farther upstream to provide a basis for determining the condition of the Columbia River fish runs.

However, it was not until more recent times that fisheries biologists coined the word "fallback" to describe a certain phenomenon that was causing the counts to become significantly inflated.

Fish passing the dam are counted as they struggle up the ladder to the upstream side. It has been found that once past the dam, a fish can become disoriented and return downstream, either via the spillway or shipping locks and sometimes through the turbines. Some fish don't survive but many do, only to make the trip up the ladder again and be counted a second time.

Oregon fishery biologists have been studying the fallback effect for several years now, both to determine the inflation factor in the counts at various dams and to determine what can be done to lessen it.

By using brightly colored, highly visible tags, inserted at the base of the dorsal fins of some 1,000 spring chinook salmon passing Bonneville, Department biologists hope to get an indicator of the number of fish that are passing the dam and continuing upstream to be counted at The Dalles Dam versus the "round-trippers" which are falling back and being counted more than once.

Tagging the fish with different colors makes it possible for the people counting at the fishway to identify the release point of each individual. By releasing groups of fish at predetermined points above, below, and near the exit of the fishway,



Al Mirati, ODFW biologist, examining one of the tagged fish in the "fallback" study. Below is one of the tags ready to be inserted into the fish at the base of the dorsal fin.

biologists will be able to develop meaningful statistics relating to the fallback problem. Counts taken at Bonneville will be compared with those upstream at The Dalles Dam.

Salmon and steelhead tend to follow the shoreline in finding their way upstream. This has presented further problems at Bonneville. After a trip up the ladder on the Oregon

side, the shoreline of Bradford Island tends to lead the fish upstream, around the upper tip of the island, then back down again toward the dam. To help break this pattern, a net wall, resembling an artificial shoreline, was created at the fishway's exit to direct the upstream migrants to the Oregon shore, which starts them on toward The Dalles. □

1975 GAME BIRD HARVEST

Counties By Region	Pheasants Hunters	Pheasants Harvest	Mt. & Valley Quail Hunters	Quail Harvest	Chukar Partridge Hunters	Partridge Harvest	Blue & Ruffed Grouse Hunters	Grouse Harvest	Mourning Dove Hunters	Mourning Dove Harvest	Band-tailed Pigeon Hunters	Band-tailed Pigeon Harvest	Waterfowl Duck Hunters	Waterfowl Duck Harvest	Goose Harvest
Benton	1,820	3,493	699	3,063	258	375	611	1,285	458	3,220	212	2,287	1,831	16,377	2,148
Clackamas	1,911	2,304	742	3,122	—	—	—	1,305	879	7,186	552	1,727	1,259	8,067	928
Clatsop	36	—	36	—	—	—	—	1,483	29	—	608	3,873	2,020	41,688	964
Columbia	643	2,049	370	1,102	—	—	—	1,416	298	3,124	755	4,677	3,506	80,703	3,193
Lane	3,582	4,966	2,677	10,598	126	455	4,670	19,334	1,309	15,112	1,167	4,777	3,867	35,833	735
Lincoln	—	—	101	—	—	—	458	1,630	—	—	618	4,309	600	5,966	206
Linn	1,829	1,395	815	3,222	—	—	1,311	5,428	1,115	11,887	386	546	2,065	20,490	1,034
Marion	3,368	5,417	1,217	6,299	—	—	798	2,135	1,212	13,395	298	1,212	3,405	28,275	5,937
Multnomah	942	1,722	72	108	—	—	72	72	248	2,483	212	792	3,750	61,760	5,932
Polk	1,469	2,103	719	1,799	—	—	582	1,267	785	9,250	284	1,324	2,232	19,250	6,773
Tillamook	59	586	121	1,224	—	—	1,162	3,901	60	551	1,080	6,610	1,547	26,068	538
Washington	2,807	4,745	818	2,871	—	—	834	2,566	647	6,071	471	3,396	1,866	22,347	654
Yamhill	2,203	3,305	884	2,905	—	—	768	1,497	726	6,479	327	395	1,223	21,418	998
NORTHWEST	32,085	36,303	830	36,303	—	—	52,134	52,134	78,758	78,758	35,925	35,925	388,242	388,242	30,040
Coos	95	131	582	4,317	—	—	870	2,490	—	—	1,321	11,230	2,165	26,939	175
Curry	—	—	153	607	—	—	255	1,141	—	—	431	4,310	378	5,470	—
Douglas	839	1,177	1,729	8,470	—	—	2,204	7,833	523	4,422	918	6,696	1,821	10,225	394
Jackson	4,097	10,078	2,145	10,791	154	474	1,358	2,577	2,128	28,103	458	676	1,177	7,735	36
Josephine	496	1,344	516	4,289	—	—	454	953	248	1,292	631	4,047	446	1,848	—
SOUTHWEST	12,730	28,474	474	28,474	—	—	14,994	14,994	33,817	33,817	26,959	26,959	52,217	52,217	605
Crook	628	1,602	446	3,461	162	88	29	59	406	6,195	—	—	839	7,470	668
Deschutes	320	356	1,066	5,611	103	177	65	36	831	7,364	—	—	1,997	16,166	3,959
Hood River	204	101	—	—	—	—	276	834	59	440	56	266	127	302	29
Jefferson	1,718	3,830	665	2,950	510	1,885	65	88	974	14,146	—	—	443	2,595	387
Klamath	3,009	7,424	850	3,745	658	1,695	647	1,094	1,026	12,338	65	124	9,790	149,530	21,089
Sherman	1,309	4,311	647	5,015	1,799	8,445	29	28	—	—	—	—	532	1,922	1,561
Wasco	2,749	6,618	1,317	5,918	2,212	7,203	443	487	870	8,972	213	474	466	2,283	1,047
CENTRAL	24,242	26,700	19,493	26,700	—	—	2,626	2,626	49,455	49,455	864	864	180,268	180,268	28,740
Baker	2,243	5,588	824	5,260	3,542	27,305	1,006	2,583	343	3,804	—	—	1,064	9,261	365
Gilliam	320	380	284	722	731	3,328	—	—	59	411	—	—	154	632	2,036
Grant	622	1,487	396	2,949	623	3,907	561	2,767	101	433	—	—	487	6,216	543
Morrow	1,550	5,872	510	1,829	996	5,652	196	320	189	2,904	—	—	539	1,866	1,317
Umatilla	7,720	29,169	1,382	7,587	1,110	5,768	1,371	3,680	69	7,951	—	—	3,367	24,052	3,437
Union	1,848	4,592	304	1,138	521	1,180	1,068	3,181	268	2,507	—	—	906	9,678	265
Wallowa	478	1,582	95	1,048	642	4,686	1,416	7,550	210	534	—	—	503	3,899	—
Wheeler	271	712	503	3,618	1,094	5,601	63	215	255	2,786	—	—	118	647	382
NORTHEAST	49,382	24,151	57,428	24,151	—	—	20,296	20,296	21,330	21,330	—	—	56,251	56,251	8,345
Harney	663	1,862	663	5,163	1,462	8,168	—	—	241	2,822	—	—	969	9,243	2,425
Lake	874	1,242	626	3,899	533	1,317	331	1,152	475	4,840	—	—	4,615	39,780	15,166
Malheur	10,011	53,362	3,370	23,610	4,868	31,804	124	153	890	10,906	—	—	3,477	40,556	1,213
SOUTHEAST	56,466	32,672	41,289	32,672	—	—	1,305	1,305	18,568	18,568	—	—	89,579	89,579	18,804
STATE TOTAL	*58,033	174,905	*28,344	148,300	*21,019	119,514	*26,649	91,355	*17,887	201,928	*10,657	63,748	*60,836	766,557	86,534

*State total omits duplication of hunters hunting in more than one county.

1975 Game Bird Seasons

by Chester E. Kebbe
Staff Biologist,
Small Game Management

Upland game bird hunters in Oregon enjoyed slightly better hunting last fall than in 1974 while waterfowl hunters experienced one of the best seasons in recent years. This was confirmed by the annual questionnaire which surveyed a random sample of Oregon's 390,917 licensed hunters. The survey shows that 89,300 upland bird hunters spent 622,300 days afield and bagged 833,000 game birds while 60,800 waterfowl hunters were afield 595,000 days and harvested 853,000 ducks and geese.

An accompanying table presents the harvest and hunting pressure by county on the major species of game birds.

Upland Game

Pheasant hunting success and hunter participation show a direct correlation with the steady decline in pheasant populations since 1959. The number of pheasant hunters dropped to the second lowest number on record while the harvest, although extremely low, increased slightly from 1974. Malheur and Umatilla Counties held the largest populations and provided 47 percent of the harvest.

Valley quail experienced a poor nesting season and, as a result, fall populations were below normal. Hunting pressure and hunting success, however, compared favorably with 1974 even though the season was shortened to 37 days. Twenty-eight thousand hunters bagged 148,000 quail.

Chukar partridge production in the Snake River drainage was down 20 percent from 1974 but in Malheur County a small increase was noted from a low breeding population. Hunters in these two popular hunting areas bagged 54 percent of the statewide harvest of 119,500 chukars.

High populations of blue and ruffed grouse throughout forested regions of Oregon resulted in the harvest of 91,300 birds, the largest harvest of grouse on record. Hunting was exceptionally good in the Blue and Willowa Mountains and throughout western Oregon.

Cool weather in late August triggered an early migration of doves and by the time the season opened on September 1 the summer population had dwindled sharply. Hunters did, however, enjoy excellent success during the first week of the season. Over

200,000 doves were taken by 17,800 hunters.

Band-tailed pigeon numbers were comparable with 1974 but hunter success was higher even with a reduced bag limit. Over 63,700 pigeons were taken by 10,600 hunters compared with a take of 59,600 birds the previous season. Practically all of the hunting was confined to the forested regions of western Oregon.

Waterfowl

The forecast of a small increase in the size of the fall flights of ducks was very apparent in Oregon. State populations during the fall and winter months were approximately 15 percent larger than the 1974 flights. More birds and good hunting weather resulted in an exceptional harvest of 766,500 ducks by 60,800 hunters. In 1974, hunters took 567,200 birds.

Goose production was also high, especially in the Arctic nesting species, and resulted in good flights of snow and Canada geese into the state. Hunters enjoyed good hunting during favorable weather conditions and bagged 86,500 geese compared with 54,100 in 1974. □

Director Proposes Substitute Siletz Measure

John McKean, State Fish and Wildlife Director, has provided Senator Hatfield and the Indian Affairs Subcommittee of the Senate Interior and Insular Affairs Committee with a draft of a Siletz Indian measure that would entitle individual Siletz Indians to health, education, and welfare benefits without involving the fishing and hunting rights issue.

"The draft we propose," McKean said, "would entitle individual Siletz Indians to the same federal health, education, and physical welfare services and benefits furnished to federally recognized tribes without actually reestablishing the tribe and creating a reservation for tribal members. Termination of the tribe in 1954 reportedly created severe social and economic problems for tribal

members. The legislation we propose is aimed at resolving those problems and at the same time retaining the independence and self-determination of the individual Siletz Indians."

McKean said that the Department would prefer that Congress pass S. 2801, the Siletz Restoration Act, including language that would make tribal members subject to the same fishing, hunting and trapping regulations as non-Indians but that sponsors of the legislation are unwilling to add the amending language.

"Our new proposal should satisfy the parties that are interested in improving the social and economic conditions of the Siletz Indians without providing any legal or procedural advantage in future claims of superior rights to fish and wildlife resources," McKean concluded. □

Questions & Answers

What elk season will the new bowhunting elk tag be valid for?

The bowhunting elk tag is a statewide tag and will be valid for all of the elk bowhunting seasons listed in the bowhunting section of the Game Mammal Regulations. The tag may also be used to hunt in the Roosevelt or Rocky Mountain bull elk rifle season provided bowhunting equipment is used.

With two general season deer tags this year, what deer tag should the bowhunter buy?

Either a black-tailed or mule deer tag will be a valid tag for any of the bowhunting seasons for deer. If the bowhunter wishes to hunt deer with a rifle, he should buy the tag for the side where he wants to hunt during the rifle season.

Big Game Seasons For 1976

Blacktail deer hunters will have five weeks, from October 2 through November 7, to seek bucks with a forked antler or better. Mule deer season will extend 12 days, October 2 through October 13, with a forked horn minimum again in effect, except in Whitehorse, Beatys Butte, and Steen Units where legal bucks will need at least four points on one antler.

In recommending a slightly longer mule deer season this year, the staff said mule deer numbers have recovered well in most northeast Oregon areas although numbers are still below average on southeast and south central ranges.

The Commission authorized 6,500 antlerless mule deer permits in 12 northeast Oregon management units where mule deer numbers are at or near winter range carrying capacity. Some 34,000 management unit and agricultural damage permits were authorized for western Oregon.

Buck hunters will have to choose between a short mule deer season or a much longer black tail season this year. Tags will specify east side or west side beginning this season and hunters will not be allowed to participate in both general seasons as in past years.

A high Cascade buck hunt was set for September 11 through September 19 with participation limited to 3,000 permit holders.

The same four muzzle loader deer hunts as last year were again set. The Patterson Mountain and Wenaha whitetail hunt areas were expanded slightly and the Dixon muzzle loader hunt will be open for bucks with forked antlers or better instead of four-point or better as was the case last year.

No refuge closures were set for deer.

Roosevelt elk season will begin November 13 and run through November 24 this year for bulls with antlers longer than their ears. A 25,000-acre area in the northern part of the Millicoma Tree Farm in Coos County will be closed to bull elk hunting this year because of low bull numbers. Some 1,175 antlerless elk permits have been set for 13 agricultural damage control seasons.

Rocky Mountain elk hunters will have a 16-day season from October 30 through November 14, again for bulls with antlers longer than the ears. After a five-day closure, controlled antlerless seasons for Rocky Mountain elk will open on November 20 and extend through November 28. Some 6,275 permits have been authorized in 23 eastern Oregon units and nine agricultural damage areas.

This year hunters who are successful in drawing a controlled elk permit will be confined to that season and not permitted to hunt during the general bull season. This regulation was adopted earlier this year by the Commission to reduce opening weekend elk hunting pressure and spread it over more of the season.

The either-sex elk season in southeast Oregon has been discontinued and hunting in those units will be for bulls only during the general season and for cows on a permit basis during a separate season.

Antelope season will run from August 28 through September 1 with 1,450 tags authorized for bucks in 20 areas. In addition, 10 tags have been authorized for doe antelope in the Murderer's Creek Unit to stabilize an expanding herd which resides on private ranch land in Bear Valley.

Twenty-two tags for bighorn rams have been authorized for seasons on Steens Mountain, Hart Mountain, and the Owyhee area.

Bear season will open on August 1 and extend through November 30 in the Cascades and central areas and through December 31 in the Coast Range and northeast area.

A one-month December cougar

season was set with 125 total tags authorized in six areas.

Silver gray squirrel season will run from September 1 through October 31 in the southwest area, Hood River, and Wasco Counties with a five squirrel daily bag limit.

Bowhunters lost some old areas but gained some new ones for 1976. Pine Grove, Fossil, and Birkenfeld bowhunts were dropped since they had originally been set up as agricultural damage control seasons and are no longer needed.

The Gerber Reservoir antelope season was expanded in size to include the entire Klamath County portion of the Interstate Unit and will be open to 150 permit holders. An earlier closing date for deer hunting on Sauvie Island was set but the Canyon Creek bowhunt was extended about a week.

Grizzly and Desolation Units were added to the eastern Oregon areas open for deer and elk bowhunting. Two new areas in western Oregon were added for elk bowhunting, the Seaside and North Fork Nehalem.

This year general season hunting regulations and seasons will be published in the familiar small booklet form. All controlled season hunts for deer, elk, antelope, sheep, and cougar, along with application instructions, will be printed in a separate tabloid-style publication.

The controlled hunt information and application cards will be available from license agents after June 15. Hunters are urged to wait until then before trying to apply for any controlled seasons. The general season regulations booklets will be out shortly after the 4th of July. Application deadlines are not until July 10 for antelope and July 20 for deer, elk, bighorn sheep, and cougar.

1976 DRAWING CALENDAR

Big Game Species	Application Period Opening Date*	Application Deadline Dates
Antelope	June 15	July 10
Cougar, Bighorn Sheep, Antlerless Elk, Antlerless Deer	June 15	July 20

* Printed regulations for all controlled hunt drawings will be available at license agencies by June 15.



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