

OREGON STATE
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RON E. SHAY, Editor

H. C. SMITH, Staff Artist

A. L. MILLER, Photographer

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JOHN W. McKEAN, Director

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The Cover

Though Sauvie Island was developed originally as a game management area, anglers now use the area more than hunters. Other types of recreational use of Commission lands are increasing. See feature article.

photo by Ron Shay

HUNTER SAFETY TRAINING PROGRAM

Instructors Approved

Month of December 10
Total to Date 3,733

Students Trained

Month of December 321
Total to Date 135,819

Total Firearms Casualties in 1968

Fatal 14
Nonfatal 74

McKean Takes Reins

On February 1, John McKean succeeded P. W. Schneider as Oregon State Game Director. Schneider resigned to take a position with the National Wildlife Federation.

John McKean was born and raised in Roseburg and received a Bachelor of Science degree in Fish and Game Management from Oregon State College in 1938.

In May of the same year he went to work full time for the Game Commission and was placed in charge of western Oregon game bird management with headquarters in Corvallis. In 1944 McKean moved to Portland as he was promoted to chief of upland bird studies for the entire state.

In 1949 he was promoted to Chief of the Game Division, a position held until his appointment as Director.

The new Director has been active in



the Izaak Walton League and the Wildlife Society. In 1962 he received the national American Motors Award as outstanding professional conservationist and is currently secretary of the Western Association of State Game and Fish Commissioners.

In Memoriam

Clark Walsh, Assistant Game Director for the past 17 years, died January 13 of cancer at his home in Gresham following a short illness. He was 60 years of age. He is survived by his wife Elizabeth and daughters Charlotte and Virginia.

Walsh was born in Nebraska on August 26, 1908. The family moved shortly after to Salem, Oregon, where he attended grade school, then to Portland where he graduated from Franklin High School. His parents were both college professors, who taught for many years at Willamette University.



Walsh was a graduate of DePauw University in Indiana and received his Bachelor of Arts degree in 1930, majoring in English and journalism. He was on the radio staff of station KGN in Chicago as a script writer until 1934 and was

also publisher of one of the first sportsmen's magazines in Oregon from 1945 until 1948.

He first began work with the Oregon Game Commission in 1935 as a fish liberator. He left in 1942 to try ranching and worked for two years in Lake County.

In 1948 he organized the Game Commission's Information and Education Division and began many of its existing programs. He was appointed Game Information Supervisor in 1950 and was promoted to Assistant Director in October 1951, a position he held since that time.

Although not a graduate in the biological sciences, Walsh was always an active conservationist and developed a broad understanding of sound game management and conservation principles. He was untiring in his support and promotion of these principles. He was a progressive visionary for the Game Commission as well as its historian.

He was active in the Izaak Walton League and the Oregon Wildlife Federation. He served on many of the Governor's advisory committees concerning natural resources and administration. He was an avid shooter and belonged to the Portland Rifle and Pistol Club and the Oregon Muzzleloaders. He was an expert outdoorsman, hunter, and fisherman, enjoying all forms of these activities. A favorite hobby was building muzzle loading rifles, then using his products in the field.

Walsh was well known by business people, ranchers and landowners, and sportsmen throughout the state and was well respected by all who knew him. He enjoyed a host of friends in all walks of life in addition to his many associates. He was greatly admired and highly respected by all his fellow workers.

Recreational Uses Of Wildlife Lands



Harold Cramer Smith



By A. V. Meyers
Wildlife Lands Supervisor

The Oregon State Game Commission owns 61,500 acres of land and controls, through documented equities, another 36,500 acres. Although public utilization of the wildlife resources on these lands receives the majority of the publicity and is the immediate concern of the sportsman, the habitat improvement accomplished thereon, and its effect on future resource conservation, is of greater importance to the long - range management program. To secure maximum use of these lands, the Multiple-Use Concept of land management is being applied.

One of the simplest explanations of the Multiple-Use Concept is found in the quasi-legal wording of the Code of Federal Regulations (30 F.R. 12912-Sec. 1725.3-3). This lists ten components, equal in priority of Multiple-Use Management of lands as follows:

1. Domestic livestock grazing
2. Fish and wildlife development and utilization
3. Industrial development
4. Mineral production
5. Occupancy
6. Outdoor recreation
7. Timber production
8. Watershed protection
9. Wilderness preservation
10. Preservation of public values

Application of the Multiple-Use Concept requires that all components be considered. However, one or a group of these components may be, and usually is, given precedence over others based upon conditions and demand. Lands selected for Commission ownership are those that appear to have the highest potential for fish and wildlife development and utilization and this use is given precedence.

When the primary use or uses has been selected, other uses fall into four categories.

1. Compatible. Uses that do not conflict with the primary purpose: e. g. Tim-

ber production on lands managed primarily for fish and wildlife purposes.

2. Complementary. Uses that enhance or assist the primary use management: e.g. On western Oregon waterfowl areas, summer livestock grazing removes the season's vegetative growth making the fall green growth available to the migrating and wintering waterfowl.

3. Conflicting. Uses that conflict with the primary purpose: e.g. Certain agricultural practices in areas of heavy game concentrations.

4. Related. Activities that are necessary or desirable to accommodate the primary uses: e.g. Picnic facilities in areas of heavy fisherman use or roads and parking areas in hunting areas.

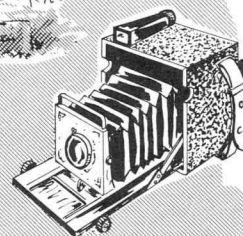
It is the related uses that create serious management problems for the Commission. Picnic facilities, roads and parking areas are public property and should not, even if possible, be limited to hunter and fisherman use. This results in a concentration of people creating a serious and undeniable need for more extensive sanitation facilities and garbage disposal which are expensive to construct, operate, and maintain.

Accommodating these related uses brings on other recreational activities that add substantially to the maintenance load. Sight-seeing, swimming, water-skiing, rock-hounding, camping, boating and hiking, etc., are all admirable recreational pursuits but unrelated to the fish and wildlife field.

There is an ugly side to this problem. Vandalism, misuse, and thefts are serious abuses of the public property. It is often said, and hopefully true, that the perpetrators of these abuses are a small faction of the public but regardless of the proportion, the results are costly and irritating to the landowners and the rest of the land users.

The Commission has 117 fishing access sites that are generally designed for

(Continued Next Page)





Public boat ramps developed by the Game Commission as well as those developed and maintained by various counties suffer from thoughtless acts. A rather large portion of this boat ramp was taken over as a garbage dump.

(Continued from Page 3)

day use by anglers and do not have adequate facilities for camping. Even though areas are posted against camping, the practice is a common misuse of the properties. For example, on numerous occasions fruit pickers and other seasonal workers have or attempted to establish semi-permanent camps to serve for the duration of their seasonal jobs.

It seems that state property also invites the dumping of garbage simply because it is public land. It is known that private land suffers from this practice but apparently not to the extent of the abuse of state land. Although police records show numerous arrests and convictions for this abuse, it has not been stopped.

The "hey-day" of the "rustler" is supposed to have passed, but livestock theft is com-

A group of Boy Scouts learns about waterfowl banding. Scouts and other youth groups not only use Commission lands to fulfill requirements for various conservation badges, but also utilize the areas just for outings.



mon enough on these state lands to adversely affect the marketability of grazing permits.

The amount of hunting and fishing use of an area depends upon the quantity and quality of hunting and fishing provided, but the amount of other recreational uses varies indirectly proportional to the distance from centers of human population. The mobility of sportsmen and their ability to find good hunting and fishing sites are amazing. Other recreational users are not so mobile in that they will not generally travel the distances or utilize the secondary roads as readily as do the sportsmen. Consequently, the 12,129-acre Sauvie Island Game Management Area located along U.S. Highway 30, fifteen miles from downtown Portland, attracts a substantially greater number of other recreational users than the other lands of the Game Commission. A recent annual census of Sauvie Island users produced this data:

Use	Total Visits	Percent of use
Fishing	92,763	44
Hunting	11,609	5
Sight-seeing	66,303	31
Picnicking	16,637	8
Water sports	12,197	6
Dog training	4,138	2
Berry picking	2,987	1
Bird-watching	2,894	1
Artifact hunting	644
Mushroom hunting	317
Miscellaneous	4,807	2
	215,296	100

The Game Commission has financed the acquisition and development of the Sauvie Island Game Management Area

and provides funds for its annual operation and maintenance. Maintenance includes the payment of taxes the same as if in private ownership. The 1968-69 taxes on this area paid to Columbia and Multnomah Counties amounted to \$36,574.59. The Game Commission funds are derived entirely from the hunters and anglers. In other words, the sportsmen are providing this project on which, according to the recent census, 51 percent of the visits are by other recreational users. The Commission's other sixteen management areas are more distant from the centers of dense human population and the other recreational users' visits are well below the hunting and fishing use, so the current problem centers on the Sauvie Island project.

Snowmobiles are unquestionably a useful and efficient means of winter travel. However, their mobility seems to invite the unscrupulous operator to illegally haze game animals. This, not uncommon, hazing of weather weakened animals is very destructive to wildlife.

The Game Commission believes in the principle of multiple use of the lands and waters it administers. However, the questions arise as to whether hunters and fishermen should be required to pay for facilities and services needed to accommodate related uses of lands that are dedicated to fish and wildlife production.

As this related use continues to throw more strain on the game fund, it appears that broader financing of projects that provide wide public benefits is justified.

OPENING HUNT DATES SET

Following a public hearing on January 9 the Game Commission set several opening dates for 1969 hunting seasons. The early setting of these dates was done to assist persons who have to make their vacation plans early in the year.

Only the opening dates were set at this meeting. Additional details such as bag limits, season lengths, unit permits, etc., will be set following additional hearings later this year. The necessary biological information needed for determining these details is not available at this time.

Opening dates adopted for 1969 are:
General Deer Season—Oct. 4
Pheasant and Quail Season—Oct. 18
Rocky Mountain Elk Season—Nov. 1
Roosevelt Elk Season—Nov. 15

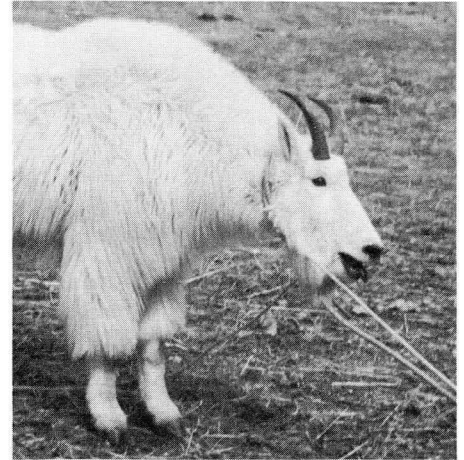
In other action at the meeting the Commission authorized construction of five new ponds at Oak Springs Hatchery which will increase the production of the station by approximately 14,000 pounds of trout and steelhead.

For the Record

From time to time questions arise concerning the dates of certain occurrences in the wildlife field here in Oregon. Introductions of various species fall into three main categories. This month we'll list the mammals. In a future issue we'll include information on birds and later on fish.

The importation of some of these animals was responsible for the establishment of the species. In other cases the importing of the animals simply added to an already existing population. We are merely listing the dates of the various occurrences "for the record." Transplantings of the mammals from place to place within the state are not listed.

- 1912 — Fifteen elk released into the Billy Meadows area of the Wallowas.
- 1913 — Another carload of elk released in the same area. These animals came from the Yellowstone Park herds. Native elk were in the area already.
- 1920s—(Exact dates unknown) Introduction of red fox, eastern cottontail rabbit, and eastern gray squirrel from Missouri. (None native in Oregon)
- 1922 — Three pairs of moose shipped in from the Kenai Peninsula of Alaska. They were released in the Tahkenitch Lake area but failed to survive. The last animal seen in 1926. (Not native to Oregon)
- 1930s—Opossum introduced from Mississippi. First records of them were in Umatilla and Clatsop Counties. (Not native)
- 1938 — Nutria illegally turned loose in Oregon. Population eruption started in about 1958 after additional farm-raised animals had been released or escaped. (Not native)
- 1939 — Twenty-three Rocky Mountain bighorn sheep released on Hart Mountain from Montana. Last survivor observed in 1947. (Last natives disappeared about 1935)
- 1950 — In the spring, five mountain goats were obtained from Washington state and released near Wallowa Lake.
- 1954 — November 5—California bighorns from British Columbia released into a 34-acre holding pen on Hart Mountain. The 20 animals were released into a 600-acre pen the following year and in June 1957, 18 sheep were allowed to escape into the wild. (Last of native animals disappeared about 1916)
- 1959 — Releases of fisher into the Klamath and Minam areas of the state. A total of 24 animals was brought in from British Columbia. Native animals still existed in parts of the state.



Mountain goats came in 1950.



Bighorns return in 1954.

Roaring River Fish Hatchery



Roaring River crew spawning some of the "Super Trout" developed at the hatchery through selective breeding. The crew from left to right: Ross Kessell, Tom Herbst, Bob Duncan, and Bill Wingfield, superintendent.

Located in western Linn County about 18 miles northeast of Albany is the Roaring River Fish Hatchery, an important link in the Game Commission's chain of fish culture stations. Anyone unfamiliar with the area may have some difficulty finding it. It can be approached by more than one route, but the best bet is to take the Albany-Lebanon highway and about seven miles east of Albany make the turn that leads to the town of Crabtree. The hatchery is approximately eight miles on beyond Crabtree. Driving time from Albany is about one-half hour.

The hatchery derives its name from the stream on which it is located. Roaring River, which probably "roars" no more than most streams of similar character, empties into Crabtree Creek, a tributary of the South Santiam River.

The station was constructed in 1924 at a time when the Commission's hatchery operations were undergoing rapid expansion. Several improvements and changes have been made since the initial construction. The site includes approximately 20 acres, several additional acres having been added in recent years.

Water for the hatchery, about 17 cubic feet per second, is diverted from Roaring River by a small dam located one-quarter mile above the hatchery. Water temperature fluctuates seasonally with the summer average pegged at about 54

degrees, dropping in the winter months to a 45-degree average. This is in contrast to a spring-fed hatchery where the average may not change more than two or three degrees throughout the year.

Although the species of fish raised may change depending on planting needs, Roaring River is used primarily to rear fall rainbow, summer steelhead, and to produce rainbow eggs. Among other fish raised here have been kokanee and cutthroat. About 1¼ million rainbow are reared annually, of which 220,000 are raised to catchable size. Most of the rainbow are released as fingerlings in lakes and reservoirs, whereas the larger yearlings are liberated primarily in streams.

About 5,000 carefully selected rainbow brood fish are kept on hand. In the selection process desirable characteristics such as speed of growth, proper body conformation, color, size, and egg production are sought. This selection process has resulted in increasing egg production to as many as 7,000 eggs per female. Some of the large brood fish, weighing up to 15 pounds, have been referred to as super trout. Normally the brood fish are spawned for three years and then released. New brood fish are added each year. They produce about 11,000,000 eggs annually, most of which are transferred to other Game Commission hatcheries for hatching and rearing. The large brood

pond and spawning shed have been designed to ease the task of spawning. If you wish to observe this operation, your visit should be timed to take place in the period from the early part of November to late January.

From the spawning shed the freshly fertilized eggs are moved into the hatching house and placed in wire baskets suspended in troughs. They must be tended constantly to prevent the onset of disease or other infection. After the eggs are eyed, many of them are shipped out to other stations. The balance are hatched, and as soon as the egg sac has been absorbed the small fish are fed a very finely ground pelleted food. After a few days of feeding, the young fry are moved to outside ponds. As many as 400,000 fry can be placed in a single pond.

The fish are graded periodically because they do not all grow at the same rate. Grading reduces the problem of large fish eating the smaller ones, makes for more efficient use of food, and enables the hatcheryman to release fish as they reach planting size. At times, fish are marked prior to planting by the removal of one or more fins so that they can be identified in the catch. This permits an evaluation of the contribution of the hatchery fish to the catch, sport or commercial.

Approximately 100 tons of food are consumed annually. Food pellets are scientifically formulated to meet the nutritional requirements of the growing fish. Automatic feeders mounted on the pond walls are timed to scatter pellets on the surface of the pond at periodic intervals during daylight hours.

An interesting operation at Roaring River is that involving summer steelhead. Starting usually in July, adult summer steelhead are trapped at Valsetz Falls on the upper Siletz River and taken by tank truck to the hatchery where they are placed in a large holding pond. About 130 fish are trapped annually. They are retained in the pond without feeding until the following spring, with egg-taking normally starting in mid-March. Approximately 300,000 eggs are taken. If it is desired to speed up hatching time, the "green" eggs are shipped to a spring-fed station where the water temperature is higher. As the fish reach release size, they are planted in the Siletz and other streams in which the Commission is attempting to build up summer steelhead runs. The adult steelhead from which the eggs are obtained are marked and returned to the Siletz River.

Catchable size rainbow are released in the spring and summer months. Most

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Roaring River

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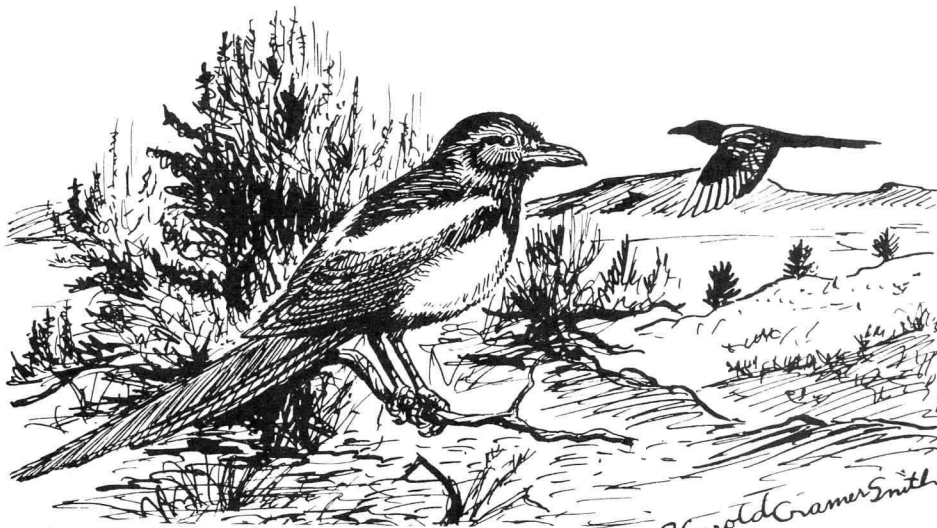
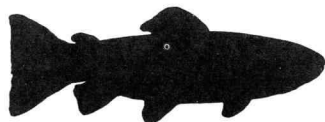
of the fish are removed from the hatchery in a large, refrigerated tanker truck in which up to 2,000 pounds of fish can be carried. Poundage that can be safely carried depends on length of haul and size of the fish. A small portable tank mounted on a pickup truck is used on short distance hauls. To obtain good distribution within a stream and to assure maximum return to the angler, fish are released at a number of points. They average about three to the pound, or larger, when planted.

Most of the rainbow produced at Roaring River are released in the Clackamas drainage with the remainder going into other popular lower Willamette River tributaries. Approximately 100,000 pounds of rainbow trout are released annually.

A trip to the Roaring River Hatchery would not be complete without visiting "Herman," the sturgeon. He has been on display at the hatchery since 1932. Thousands of people have seen him at the State Fair exhibit in past years.

Limited picnic facilities, including tables and outdoor fireplaces, are available. Camping is not permitted on the hatchery grounds. Visiting hours are from 10 a.m. to dark.

Although its primary purpose is to produce fish, the hatchery also affords an opportunity for people to learn about fish and fish culture. Mr. Wingfield and his assistants will help make your visit as informative and pleasant as possible.



Black-Billed Magpie

The black-billed magpie is without doubt the most conspicuous bird of the eastern Oregon landscape. It is a common permanent resident of the brushy foothills and wooded streamside areas from which it forages out into the open country in search of anything edible.

The magpie is a large-appearing, slow-flying bird, spectacularly colored in black and white. When the bird is in flight the flashing white of the wings and breast and the long, wedge-shaped tail streaming out behind provide unmistakable marks of recognition.

While the state is still in the grip of winter, the magpie commences to refurbish its nest of prior years or to build a new one, a job which may take six weeks. A site among the branches of a small tree or well within a thorny thicket is usually selected. The nest proper, a bowl of mud and grass, is surrounded and domed over by an enormous mass of large and small sticks. An entrance and exit is built in opposite sides of this formidable fortress to permit rapid escape from an approaching danger.

In the western states the magpie has been despised as a thief and scavenger. Like other members of the crow family, it has a cannibalistic appetite and delights in such tidbits as the eggs and young of other birds. Livestockmen, too, condemn the bird because of its habit of pecking and enlarging the open sores of branded cattle.

All of the magpie's activities are not destructive, as it also performs some very useful services. It is especially fond of carrion and helps rid the roadways of rabbits, squirrels, and other small mammals and birds which have been killed by passing vehicles. Relief is brought to livestock when a magpie lights on their backs and makes a meal of the embedded ticks. But the basic diet is composed of the large insects such as crickets, grasshoppers, and weevils, most of which are destructive of farm crops.

Every man's hand is against this bird, but, wise in the ways of the world and as able to fend for itself as the crow, the magpie continues to thrive.

—C. E. Kebbe

Offshore Salmon Catch Down

The offshore salmon catch by sport fishermen totaled just over 282,700 fish taken by almost 290,400 anglers fishing the bays and adjacent offshore shoal areas along the Oregon coast last summer.

According to the catch figures, the take by sport fishermen at ten ports during the summer of 1968 was almost 90,400 salmon below the 1967 catch in these same waters, when over 376,100 salmon were taken by 336,200 anglers. The 1968 sport catch included 257,600 coho salmon and almost 24,800 chinook compared with 333,600 coho and 42,500 chinook landed the previous year.

Winchester Bay was the only popular fishing center on the coast where anglers enjoyed better salmon fishing than they did in 1967. Also, because of the excellent fishing reported in this area all summer, more anglers participated than the number recorded the year before.

In most areas biologists reported salmon to be pretty well scattered all summer with very little concentration or schooling of fish as in previous years. In addition, several bad weather periods occurred at which times anglers were unable to get to outside fishing waters. These two factors contributed to both the fewer angler-days catalogued as well as the much reduced catch.

Editor's Note

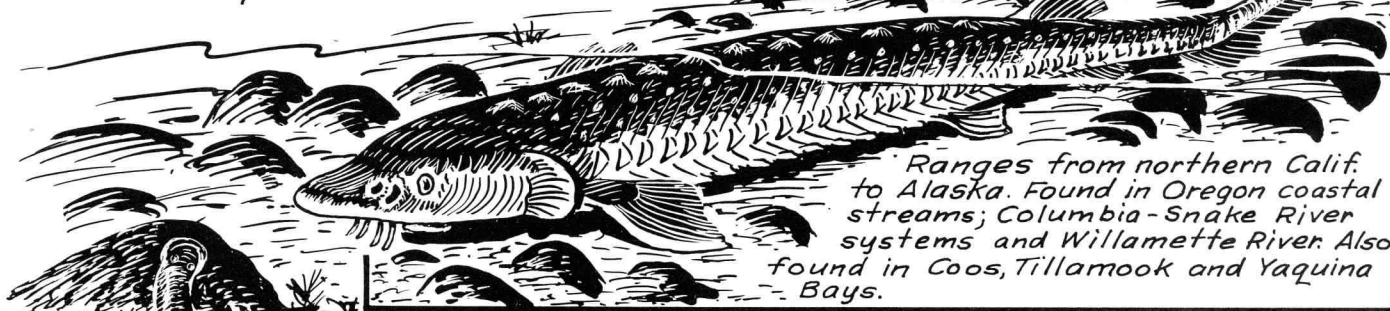
In case you hadn't noticed, your January 1969 issue of the Bulletin contained a subscription card. If the card is not returned with proper information on it, your name will be dropped from the Bulletin mailing list.

Through this method we are attempting to drop from our 60 thousand plus list those individuals who are deceased or who are no longer interested in receiving the Bulletin.

Current plans are to continue free circulation of the Bulletin to any interested person; however, we do want to eliminate from the mailing list those not wanting to receive it.

WHITE STURGEON

Acipenser transmontanus



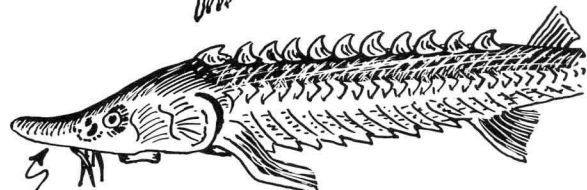
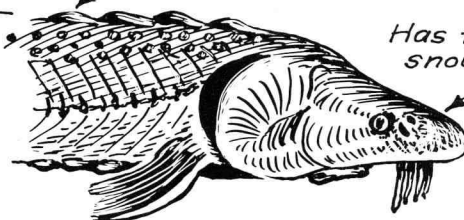
Ranges from northern Calif. to Alaska. Found in Oregon coastal streams; Columbia-Snake River systems and Willamette River. Also found in Coos, Tillamook and Yaquina Bays.

Main diet is lamprey, dead or alive. Suckers, carp, squawfish, young salmon, clams, freshwater mussels, snails, insect larvae and a large variety of vegetable matter.

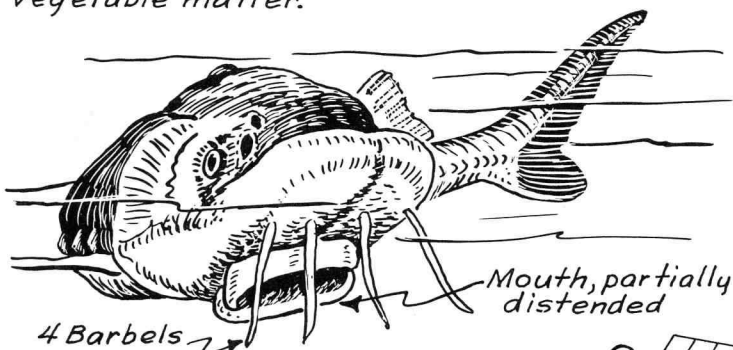
Harold Cramer Smith

Scutes tend to flatten in mature fish

Has flattened head, blunt snout in adults.



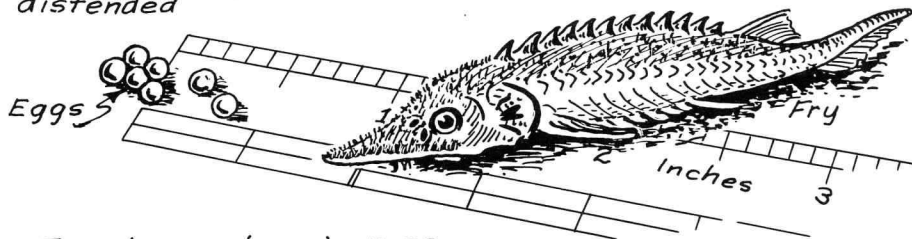
Has flattened head with sharp snout in young. 5 rows of scutes or bony plates. (These are sharp in young fish.) Cartilaginous skeleton.



Mouth, partially distended

4 Barbels

Grows to lengths of 20'; weights to 1800 lbs.
Color: dark grayish, spotted on back with no stripes.
Small mouth directed downward, thick lips, no teeth.
Upper lobe of tail elongated much like a shark's.



Females mature in 15-20 years, males younger. Spawn in May & June. Lay up to three million eggs, spawn every 3 to 4 years. Eggs dark gray 1/10" or larger sink to bottom; stick to gravel, stones, logs, etc. Young hatch in one to two weeks; fry like shallow bays.



1634 S.W. ALDER STREET
P.O. BOX 3503
PORTLAND, OREGON 97208