

MINUTES OF THE MEETING
FISH AND GAME COMMITTEE
MONTANA STATE SENATE

March 5, 1987

The tenth meeting of the Senate Fish and Game Committee was called to order at 1:00 P.M. on March 5, 1987 by Chairman Ed Smith in Room 402 of the Capitol Building.

ROLL CALL: All members of the Senate Fish and Game Committee were present with the exception of Senator William Yellowtail, who was excused to present a bill at a hearing scheduled at the same time as this hearing.

CONSIDERATION OF HOUSE BILL 64: Representative Marion Hanson, House District No. 100, sponsor of the bill, stated the bill would require competency training for persons under 18 years of age before purchasing abow and arrow hunting license. A one dollar fee increase to cover administrative costs had been deleted in the House, stated Hanson, but this is a consideration that should be amended back into the HB 64.

PROPONENTS

Scott Ross, Montana Bow Hunters' Association, distributed written testimony in favor of HB 64. (Exhibit 1)

Jan Hamer, Montana Bowhunter Association, Montana Archery Association, and Lewis and Clark Archery Club, gave an extensive overview concerning the National Bowhunter Education Program which provides bowhunters with the fundamentals of good, safe bowhunting, and gives the hunter the appreciation and respect for the environment in which hunt while maintaining the highest standards within the sport. The immediate objective is to instill a responsible attitude and to assist the hunter to adapt and follow an accepted behavior concerning people, wildlife, and environment. Hamer stated that the course is presented in two sections: The Hows of Bowhunting and the Field Experience.

Ron Marcoux, Assistant Director of the Fish, Wildlife and Parks, presented written testimony to the committee (Exhibit 2)

Jean Klobnak, Montana Wildlife Federation, stated support of HB 64. Klobnak presented written testimony to the committee. (Exhibit 3)

OPPONENTS

There were no opponents to HB 64.

QUESTIONS FROM THE COMMITTEE:

Senator Greg Jergeson asked if the entire state would have access to qualified instructors. The organization is aggressively trying to locate qualified instructors to cover the needs. The instructors are willing to travel if needed. The course is six hours and can be presented at one time.

Senator Bengtson asked if there will be a fee for the course. Marcoux replied that there would be no charge. The funding would be provided by the \$1 increase, which would provide the needed materials.

Senator Smith asked why the \$1 charge was removed by the House Fish and Game Committee. Hanson replied that Rep. Cobb said approximately \$100,000 was being "pumped" into the Department from archery, although very little funds were being used for archery programs. The Department and Bowhunters indicated that the \$1 should be put back into the bill. Currently, the program is "bare bones budgeted." Once the program is ongoing, the education materials needs to be updated.

Senator Smith commented on the Safety Hunting Course for firearms. The young people know the proper hunting procedures and demonstrate their knowledge and appreciation of a safe hunt.

Representative Hanson closed the hearing. There is a year's lag time for availing all young hunters to participate in the course of study. The present license is \$6; the proposed license fee would be \$7.

CONSIDERATION OF HOUSE BILL 93:

Senator Marion Hanson, House District No. 100, stated that the purpose of the bill is to allow the taking of catfish and non-game fish with a longbow and arrow. The Fish, Wildlife and Parks Department would set up the regulations.

Ron Marcoux, Assistant Director of Fish, Wildlife and Parks, offered written testimony concerning HB 93. (Exhibit 4)

Robert Vandervere, a concerned citizen lobbyist, Helena, gave an in depth demonstration on the "Art of Noodling." Using "natural" techniques to locate and mesmerize an unsuspecting catfish, Vandervere described the prelude to the coup de grace. Vandervere stood in support of HB 93. Exhibit 4-A)

Senator Yellowtail asked if bow and arrows could be used on carp. Yes. Senator Bishop asked if kids need a license when they shoot carp with the bow and arrow. Yes. Senator Bengtson asked what are the nongame fish. The information concerning the game and nongame species was provided by Marcoux. (Exhibit

Representative Hanson closed the hearing on HB 93. Channel Catfish is the common name of the species in Montana.

CONSIDERATION OF HOUSE BILL 131

Representative Ellison, House District No. 81, chief sponsor of the bill, stated the proposed bill is an act to provide authority for the Department of Fish, Wildlife and Parks to sell excess fish eggs that are in stock and are beyond the Department's needs. It is sometimes difficult for the private hatcheries to obtain fish eggs. The cost for fish eggs is approximately is \$6.50 to \$10 per thousand.

PROPOSERS

Ron Marcoux, Assistant Director and the Fish, Wildlife and Parks, presented written testimony to the committee.
(Exhibit 6)

Senator Bengtson inquired how many fish hatcheries are there in Montana and where are they located. Marcoux provided this information to the committee. (Exhibit 7)

OPPOSERS

There were no opposers to HB 131:

QUESTIONS FROM THE COMMITTEE

Senator Smith asked if there would be competition with private industry. Marcoux explained there would be no competition, but could be able to provide should there become problems of securing the eggs from the private sector.

There were no further questions from the committee.

Representative Ellison closed by saying the problem of securing fish eggs may happen only once in ten years. There was a problem this year in Washington with over booking of fish eggs which delayed the purchasing of the eggs for several months. Senator Smith stated that weather is the major problem arising from fish egg production.

EXECUTIVE ACTION

DISPOSITION OF HB 64

Senator Bengtson moved the amendment to reinstate the \$1 per bowhunter license. The motion carried unanimously.

SENATE FISH AND GAME
March 5, 1987
Page 4

Senator Bengtson moved that the committee recommend a BE CONCURRED IN AS AMENDED. The motion passed unanimously.

DISPOSITION OF HB 93

Senator Jacobson moved that the committee recommend a BE CONCURRED IN ON HB 93. The motion passed unanimously.

DISPOSITION OF HB 131

Senator Jergeson moved that the committee recommend a BE CONCURRED IN AS AMENDED. The motion passed unanimously. Senator Jergeson will carried HB 131.

ADJOURNMENT: There being no further business before the committee, the meeting adjourned at 2:17 P.M.



SENATOR ED SMITH, Chairman

ROLL CALL

SENATE COMMITTEE--FISH AND GAME

50TH LEGISLATIVE SESSION - 1987

+++++

Date: March 5, 1987

NAME	PRESENT	ABSENT	EXCUSED
Senator Ed Smith, Chairman	X		
Senator John Anderson	X		
Senator Judy Jacobson	X		
Senator Elmer Severson	X		
Senator Greg Jergeson	X		
Senator Al Bishop	X		
Senator Esther Bengtson	X		
Senator Wm. Yellowtail Vice-Chair	X		Excused to present Xa bill at hearing

5, 1987

NAME	Complete Address and REPRESENTING	BILL #	Check One	
			Support	Oppose
Scott Ross	Montana Bushwhacker's Assn Box 5221; Helena 59604	HB 64	X	
Robert Van Carter	Self	HB 64	X	
Van Lamm	Montana Bushwhacker's Assn Montana Archery Assoc.	HB 64	X	
Ron Marcoux	DFWP	HB 64 93	X	
Tim Pool	DFWP	HB 64	X	
Meritt Pido	Self Box 15 Stanford, MT 59717	HB 64	X	
Rich Sterkel	Lavina School Visiting Lavina, MT 59046	HB 63	X	
Dan Barta	Lavina School Visiting Lavina, MT 59046	HB 64	X	
Tom Fidel	Lavina School Visiting Lavina, MT 59046	HB 64	X	
Teresa Watson	Lavina High School "	HB 93	X	
Marty Siga	Lavina High School	HB 93	X	
Galen Smullen	LAVINA HIGH SCHOOL	HB 93	X	

SENATE FISH AND GAME

EXHIBIT NO. # 1

DATE

BILL NO.

Mar. 3, 1987

HB 64



Testimony Presented Before the Senate Fish and Game Committee in Support of HB64 on Behalf of the Montana Bowhunters Association by Scott Ross

The Montana Bowhunters Association supports HB64.

HB64 would require bowhunters under the age of 18 to be certified competent before obtaining a bow and arrow license; the bill also provides for a course of instruction for the purpose of certifying those under the age of 18 in the safe handling of bowhunting tackle.

The language authorizing the 'bowhunter safety' course is nearly identical to that which authorized the present hunter education program. The substance of the new course, however, will be considerably different.

The differences between firearms and bowhunting tackle are obvious. One aspect shared by the two sports is the necessity for respect in the safe handling of a weapon. The differences in weapon characteristics suggest that a separate bowhunter education program is needed. Other states have recognized this need and have established such programs.

Any good hunter safety course is not limited solely to safe handling of weapons. Teaching young hunters proper outdoor ethics and respect for the resource, other hunters, and landowners can be an important component of these courses.

Bowhunting is a sport characterized by the use of relatively primitive weapons. It is important for bowhunters to understand the limitations of their equipment. They must rely on personal skills and good judgement if they are to be responsible hunters. A bowhunter education program can insure that young hunters are well aware of their limitations and responsibilities.

Good landowner-sportsmen relations are an objective of the responsible hunter and are the key towards lessening many of the 'social' problems afield. Education programs for young hunters provide an excellent forum in which to instill these values.

(2)

The bowhunter education program, like the present general hunter education program, would rely on volunteer sportsmen to provide instruction. The Montana Bowhunters Association is currently identifying qualified individuals who would be able to administer the program. Other interested individuals are taking instructor courses which will qualify them to participate in the program. The MBA Bowhunter Education Committee is working to insure that suitable numbers of instructors will be able to provide instruction statewide. Mike Shepard, state chairperson for the National Bowhunter Education Foundation and State Bowhunter Education Chairman for the MBA, outlines the Committee's general strategy as follows:

1. The Montana Bowhunters Association, through its' network of Area Representatives, will identify specific needs on a geographic and demographic basis.
2. Local Rod and Gun Clubs, archery clubs, or hunter education groups will serve as a 'pool' from which potential instructors will be solicited and subsequently qualified.
3. Until local instructors are qualified, MBA instructors will travel to areas to administer the course.
4. The Montana Bowhunters Association will work with DFWP to respond to requests from specific areas.

The delayed effective date of HB64 will insure sufficient time to establish suitable numbers of instructors.

The course would utilize a standard course outline and would require some instructional materials. The cost for the materials could be borne by a modest (\$1) increase in the archery stamp. This increase was included in the original provisions of HB64, but was removed by the House Fish and Game Committee. The Montana Bowhunters Association asks that this funding source be reinstated.

Education is perhaps one of our best tools to insure that new generations of sportsmen will respect the wildlife resource, other hunters, and landowners. HB64 provides for the expansion of such educational programs.

The Montana Bowhunters Association asks for your support in passing HB64.

Thank You,
Scott Ross

HB 64

#1 page 2

The ultimate goal of the National Bowhunter Education Program is to provide bowhunter with the fundamentals of good, safe, bowhunting, and appreciation and respect for the environment in which they hunt and a desire to maintain the highest standards in the sport.

The immediate objective is to instill in bowhunters a responsible attitude and to assist them to adopt and follow an acceptable behavior toward people, wildlife and the environment in which they hunt.

To maintain standards of instruction and information. A system of updating both course material and the manual is administered by the National Bowhunter Education Foundation on a yearly basis or as reprinted.

PROCEDURES:

The Bowhunter Education Course is presented in two sections:

- a. The Hows of Bowhunting
- b. The Field Experience

HOW AND WHERE THE COURSE IS CONDUCTED

The Hows of Bowhunting are best conducted in a classroom situation using demonstrations and visual aids.

The Field Experience should be conducted in the field under bowhunting conditions using broadheads whenever possible.

The Hows of Bowhunting is a four hour session.

Field Experience - it is desirable to give this session as one 2 hour block of time in the field.

BASIC COURSE OUTLINE

- ° adequate legal equipment and being familiarity with its proper use.
- ° how to sharpen broadheads and/or the proper use of pre-sharpened blades.
- ° the importance of limiting the distances of his shots.
- ° safety under field conditions.
- ° his own limitations.
- ° proper use of tree stands and/or ground blinds.
- ° following a blood trail before he makes one.
- ° reading signs in the field.

HB64
#1 page 3

HB 64
March 5, 1987

Testimony presented by Jim Flynn, Dept. of Fish, Wildlife & Parks

This legislation would be an effective way of assuring that bowhunters will go afield properly instructed in ethical behavior and the safe handling of bowhunting equipment.

We have administered the state's Hunter Education Program for the last 29 years, certifying over 190,000 young hunters in the safe handling of firearms. The experience we have gained from administration of the Hunter Education Program, the willingness of the Montana Bowhunters' Association to participate in the program, and the fact that a nationally accepted bowhunter education course is available, should make transition into a bowhunter education program relatively trouble free.

We do have one concern. The bill, as originally requested by the Bowhunters, called for a \$1 increase in the cost of a resident archery stamp to fund the bowhunter education program. That provision was eliminated from the bill by the House. We do not feel other license fees should be used to subsidize a bowhunter education program. With this in mind, we would suggest that the bill as it now exists be amended to include the \$1 fee increase to cover the costs of bowhunter education.

AMENDMENT TO HB 64
THIRD READING (BLUE) COPY

REQUESTED BY DEPARTMENT OF FISH, WILDLIFE & PARKS

Page 3, Following line 22,

Insert: "Section 87-2-708, MCA, is amended to read: "87-2-708. Class A-2 -- special bow and arrow license. A holder of valid hunting license for which a special archery season is set by the Department may receive, upon payment of an additional fee of \$6 \$7, a Class A-2 license which shall authorize the holder thereof to pursue, hunt, shoot, and kill with bow and arrow the game animals so authorized by the licenses held and to possess the carcass thereof during seasons and in areas, as designated by the Department.""

Renumber subsequent sections.

SENATE FISH AND GAME
EXHIBIT NO. 2 - page 2
DATE 3-5-81
BILL NO. HB 64

EDUCATION -- CONSERVATION



Montana Wildlife Federation

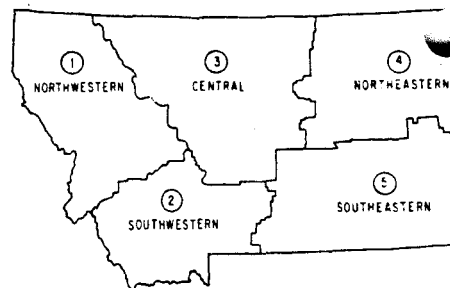
AFFILIATE OF NATIONAL WILDLIFE FEDERATION

MONTANA WILDLIFE FEDERATION

Testimony on HB 64

Senate Fish & Game Committee

March 5, 1987



SENATE FISH AND GAME

EXHIBIT NO. # 3

DATE 3-5-87

Mr. Chairman, honorable members of the Committee, my name is Jeanne Klobnak. HB 64
I stand before you today to represent the Montana Wildlife Federation in their support of HB 64.

The Montana Wildlife Federation (MWF), comprised of 4600 members is a conservation organization dedicated to promoting wildlife, wildlife habitat and sportsmen's interests.

As one of its primary goals, MWF is proud to encourage conservation education programs which build understanding for wildlife needs. Requiring competency training for young persons before purchase of a bow and arrow hunting license seeks to promote such understanding.

Presently there are no rules nor regulations which require the knowledge and skills of bowhunter safety. HB 64 would require that young persons be properly educated on how to use bow. It would require that they understand the difference between shooting an animal with a rifle and with a bow. For example, instructors would teach that game can not be shock killed with a bow as with a rifle, and instruct individuals on the location and importance of the vital areas. Young persons would be taught how to properly track an animal, and be informed on the limited distance from which game should be shot with a bow.

Competency training would also aid in promoting landowner/sportsmen relations by teaching the young bowhunters to respect the rights of private landowners.

Safe bow hunting, clean kills, and mutual respect between landowners and sportsmen means increased hunter opportunity and enjoyment in Montana.

MWF urges this committee's support of HB 64. Thankyou.

Amendments to HB 64

3rd Reading copy

1. Title, line ~~6 and~~ 7.

Following: "AND"

Insert: "INCREASING THE BOW AND ARROW LICENSE FEE BY \$1; AND"

Strike: "SECTION"

Insert: "SECTIONS"

2. Title, line 8.

Following: "~~87-2-708~~"

Insert: "AND 87-2-708"

3. Page 3.

Following: line 22

Insert: "Section 2. Section 87-2-708, MCA, is amended to read:

87-2-708. Class A-2—special bow and arrow license. A holder of a valid hunting license for which a special archery season is set by the department may receive, upon payment of an additional fee of \$6, a Class A-2 license which shall authorize the holder thereof to pursue, hunt, shoot, and kill with bow and arrow the game animals so authorized by the licenses held and to possess the carcass thereof during seasons and in areas, as designated by the department. " "

Renumber: subsequent sections

SENATE FISH AND GAME

EXHIBIT NO.

4

DATE

3-5-87

BILL NO.

HB 93

HB 93

March 5, 1987

Testimony presented by Jim Flynn, Dept. of Fish, Wildlife & Parks

HB 93 allows the taking of channel catfish and nongame fish with longbow and arrow under Commission rules and regulations.

The Commission now has such authority for paddlefish, and we support this expansion.

We are aware, at this time of only one place in the state where catfish could be taken by bow and arrow. It is below Tongue River Dam during the summer low flow period.

The bill was amended to include the taking of nongame fish in this legislation on Page 3, Line 7 which clarifies the department's authority to permit this practice.

The department supports HB 93.

COMPILED BY BOB SAILE

After a Texan safely landed a record catfish, he found he had a tiger by the tail.



In the Soup Over Noodling

In Oklahoma, wrestling a flathead catfish out of a river or lake is called "noodling" and it's a legal fishing method. In Texas, they call it "grabbling," but it's considered illegal use of the hands.

Tony Faulk, twenty-one, of Flint, Texas, would have been within his rights had he caught his 122-pound, 5-foot-long flathead catfish in Oklahoma instead of Texas. But when Texas wildlife authorities got wind that the fish, taken from Lake Tyler last summer, was wrestled ashore—not on a trotline as Faulk first claimed—they cited him for using an illegal method. He was fined \$100.

The huge catfish, had it been taken legally, would have been the Texas record for the species. It would have beaten both a 114-pound flathead taken on a trotline from Lake Livingston in 1976, the any-methods record, and a

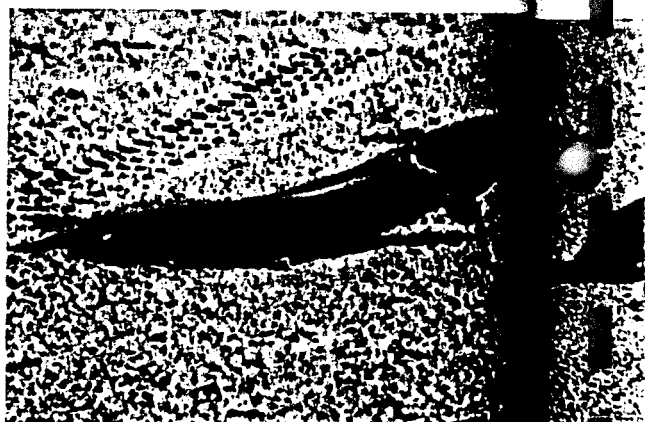
98-pound flathead caught June 2, 1985, on a Slab Spoon from the Lake Lewisville spillway by William Stephens of Lewisville.

Noodling for flathead catfish is a legal fishing technique in Oklahoma, explains Jim Becker of the Oklahoma Department of Wildlife Conservation. Flatheads are considered a nongame species in that state. Noodling for blue or channel catfish, which are considered gamefish, would be illegal.

"I guess you could call it an ancient art," said Becker. "There are guys who put gloves on and go down into the deep holes, around old car bodies, undercut banks, or tree roots. My father used to do it years ago." Becker said noodlers thrust a hand into the suspected lair of the fish, and when it eases out to investigate, they grab it.

Sounds risky, doesn't it?

"It is," said Becker.



SENATE FISH AND GAME

Fish out of water but still very much in its element. Amazing *Corydoras batrachus* crosses a road

EXHIBIT NO. 4-11

DATE 3-5-87
Finned pedestrian, released in a roadside ditch, jaywalks near Boca Raton. The Asian species started its life in Florida waters several years ago.

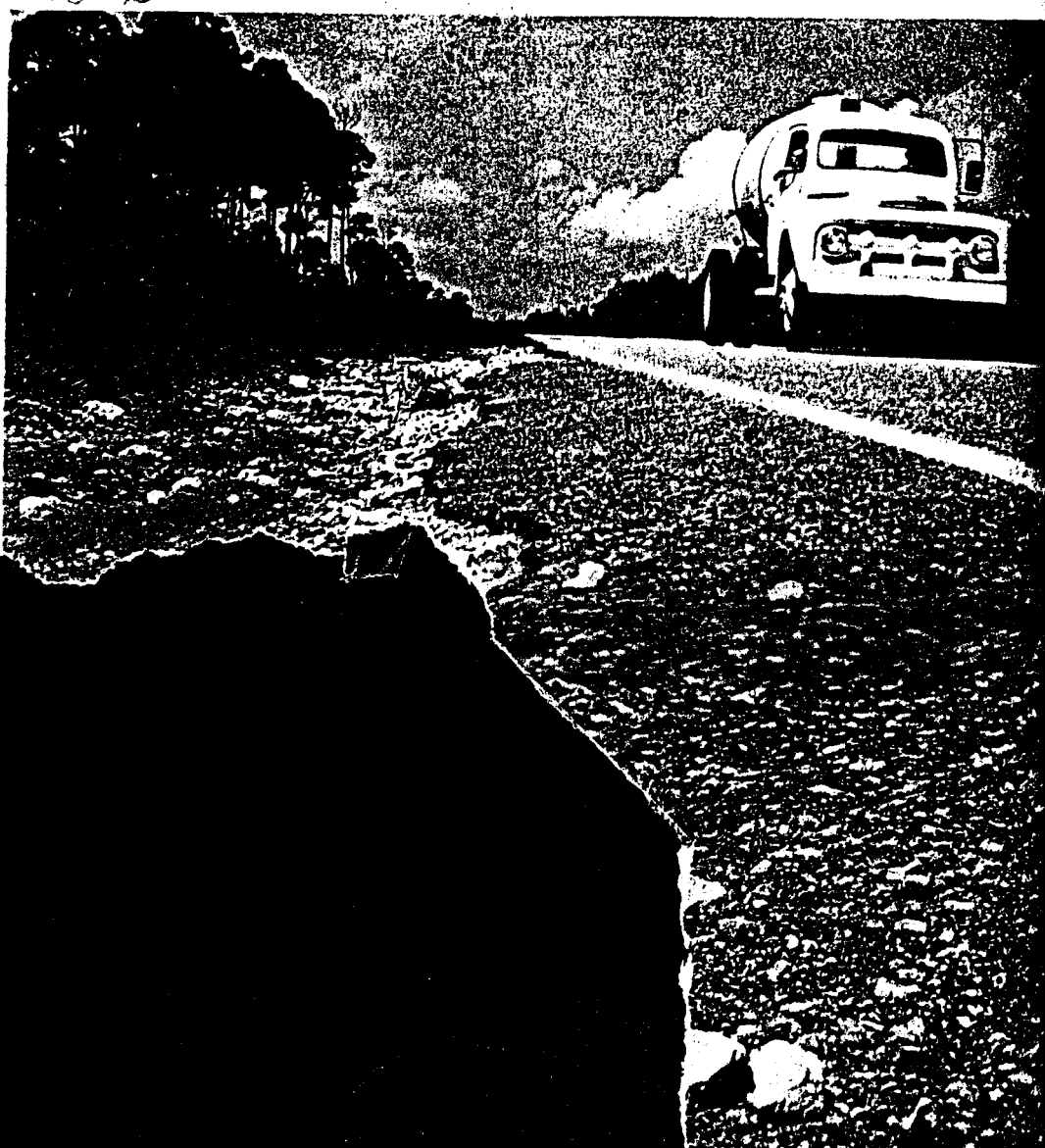
BILL NO. HB 93

by sculling with its tail as it elbows along on spiny pectoral fins. A lunglike organ enables it to breathe

during species

when specimens imported by a tropical-fish dealer literally walked out of captivity. Their progeny, meeting few natural enemies, now infest many of southeast

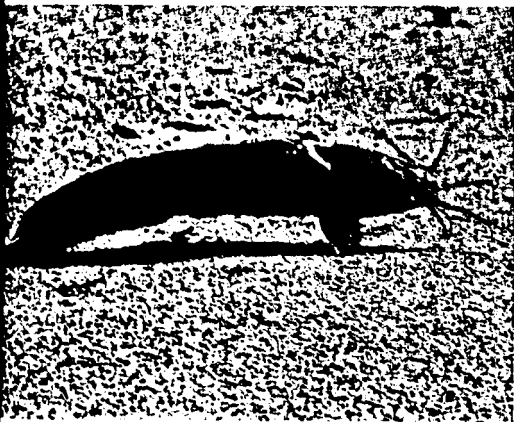
Florida's waterway complete w



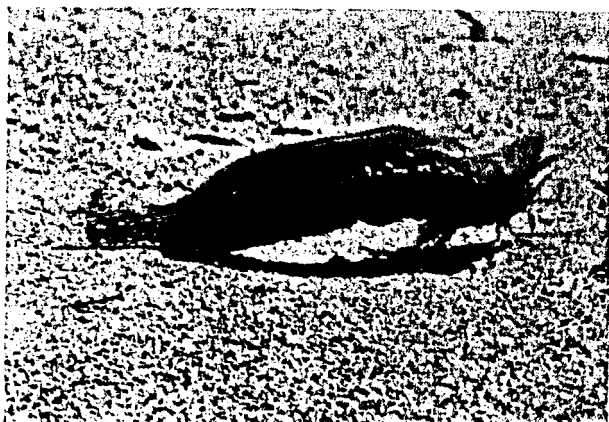
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Florida's interconnecting
waterways, where they
compete with native fish.



during land jaunts of a quarter-mile or more. The species, which may reach 22 inches in length, usu-



KODACHROMES © J. N.G.S.

ally wanders at night; the photographer persuaded this foot-long individual to take a daytime stroll.

SENATE FISH AND GAME

EXHIBIT NO. 4-F page 2

DATE 3-5-87

BILL NO. HB 83

New Florida Resident, the Walking Catfish

By CLARENCE P. IDYLL, Ph.D.

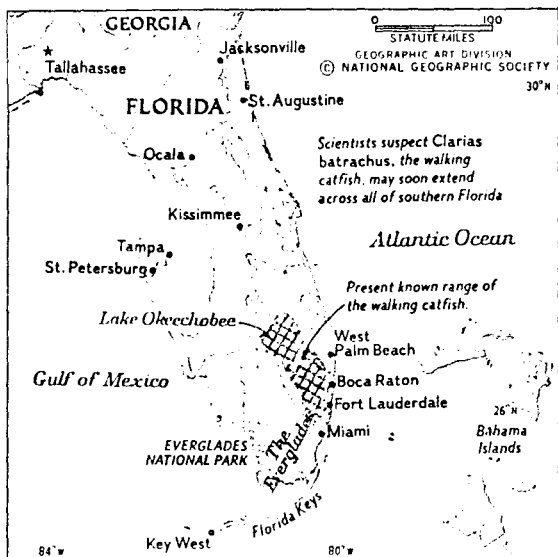
Chairman, Division of Fishery Sciences,
Institute of Marine Sciences, University of Miami

*Illustrations by National Geographic Photographer
ROBERT F. SISSON*

FLORIDA'S PLEASANT CLIMATE attracts a few eccentrics, as well as hordes of ordinary mortals. One of the recent oddball newcomers is a fish that is charged with some most unfishlike behavior: It breathes air, it strolls on land, it fights dogs. The first two of these allegations—though not the third—are true, and a more serious one can be leveled: The “walking” catfish poses a real threat to the fresh-water ecology of Florida—and perhaps of neighboring states as well.

On May 25, 1968, a night watchman at a construction site near Boca Raton, investigating the barking of his dog, was startled to encounter a strange-looking fish traveling across bare ground. This story ballooned into a widely printed tale of an excited housewife who reported, “My dog is fighting with a big catfish in the back yard.” But since then a great deal more attention has been given to the walking catfish in terms of its rapid spread across the state and the threat it poses to local species.

The walking catfish, *Clarias batrachus*, first arrived in Florida when tropical-fish dealers imported young specimens for sale.



Escaping from a death trap, a catfish climbed out of a pond poisoned with rotenone (below). After a three-month program failed to find a way to control the fish, Florida biologists had to admit, "*Clarias* is here to stay."

SENATE COMMITTEE ON FISHERIES AND GAME
EXHIBIT NO. 4-A Page 3
DATE 3-5-87
BILL NO. HB 93

Threatened zone spreads ominously from Boca Raton, where *Clarias* first escaped. Large numbers of catfish have been seen marching together across the countryside. Florida fisheries expert Vernon Ogilvie (opposite, left) has declared the species "unmanageable."

Some apparently escaped as long as three to six years ago; now they are thriving in a wide area of southern Florida.

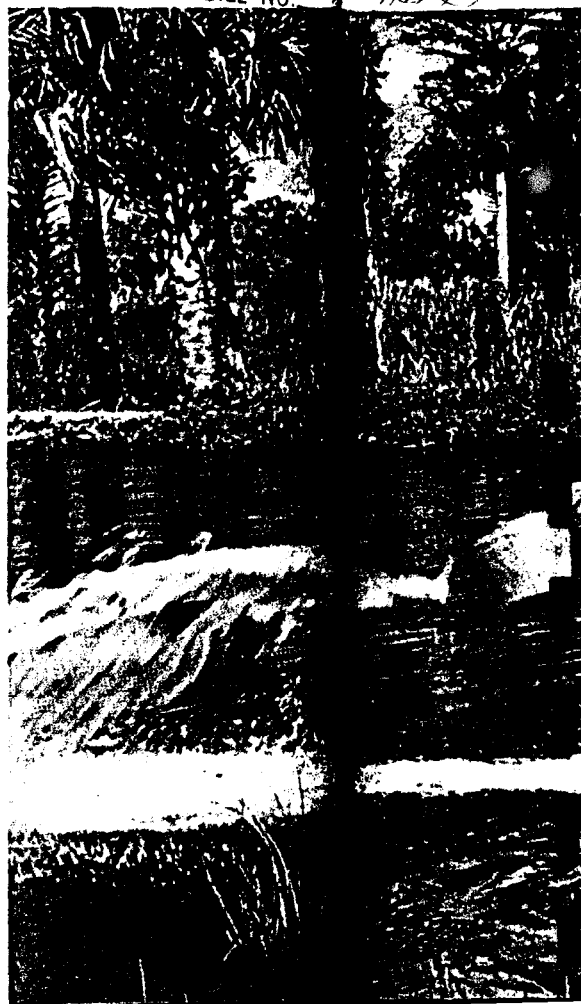
I get the same questions from nearly everyone to whom I show a walking catfish: "Are they only that big?" and "Where are their legs?" Their fabled ability to tramp over the countryside and fight dogs has apparently created the image of an enormous, menacing creature. In truth, *Clarias batrachus* grows only to about 22 inches in eastern India and Southeast Asia, whence it comes. So far, the largest collected in Florida has been 18 inches long.

Most of the walking catfish originally imported were albinos—pale pink with a darker pink head. They have long, somewhat eel-like bodies and large flattened heads bearing eight long barbels. These are obviously important sense organs; the fish reacts instantly when the barbels are touched.

Many of the individuals found in the wild in Florida are still albinos, but a substantial number of offspring have reverted to the normal colors, from pale slate-gray to mottled browns and blacks (page 850).

At first I was doubtful that the fish actually walked, in the sense of using limbs to propel themselves. But after virtually nose-to-nose observation, I am convinced that they do. While much of their forward progress is made with a snakelike slither and vigorous thrashing of the tail (preceding pages), the walking is aided by the use of stout spines in the pectoral fins (opposite, upper).

To walk on land, the catfish must be able to breathe air. Indeed, even in the water *Clarias* comes to the surface to gulp air at intervals. To allow for this, the rear part of each gill has evolved into a sort of lung (diagram, opposite).



Tools of an

TRAVELER... *Clarias* has learned to survive in part by the use of its pectoral fins, and balance in swimming. Its stiff spine, upper ribs, and into the ground and propel it while it punctures the skin of a mud, a mucous membrane wound and triggers a... The breathing apparatus has a double duty. Elaborate the gills, right, in the lungs and enable the fish to breathe air for hours while it is in fact, in its natural habitat, comes to the surface to breathe.

Tools of an odd fish

TRAVELER BY LAND AND WATER, *Clarias* has been equipped by nature to survive in either realm. Each of its pectoral fins, used for steering and balance in swimming, has a long stiff spine, upper right, that can dig into the ground and help balance and propel it while on land. If a spine punctures the skin of a human handler, a mucous secretion enters the wound and triggers a painful reaction.

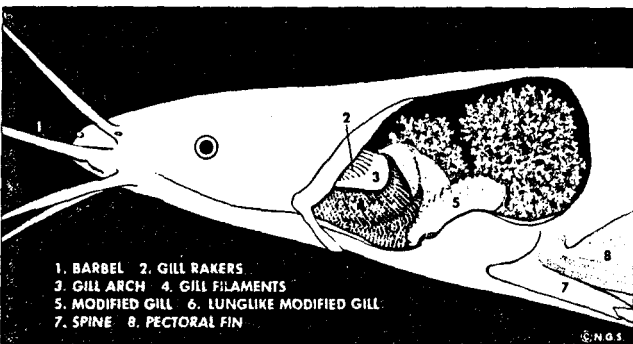
The breathing apparatus, too, does double duty. Elaborate organs behind the gills, right, function much like lungs and enable the fish to breathe air for hours while out of the water. In fact, in its natural element, it often comes to the surface for air.

SENATE FISH AND GAME

EXHIBIT NO. 4A Page 4

DATE 3-5-87

BILL NO. HB 93



KODACHROMES © NATIONAL GEOGRAPHIC SOCIETY





KODACHROMES BY ROBERT F. SISSON © M.A.A.

True color showing, a normally pigmented catfish turns as if to intimidate a challenger. Most *Clarias* specimens imported were albinos, but many descendants—including this one—have reverted to gray, brown, or black. Whisker-like barbels, equipped with taste buds, brush along the bottom in search of food. *Clarias* devours almost anything edible—worms, mussels, other fishes, insects, water plants. A glutton, it sometimes eats until its belly



SENATE FISH AND GAME
EXHIBIT NO. 417
DATE 3-5-87

BILL NO. 11543
Mauling a bullhead un-
lucky enough to share its
tank, a 13-inch albino
catfish displays its feroc-
ity. Most fishes give *Clar-
ias* a wide berth; even
a voracious piranha re-
treated when first con-
fined with a walking cat-
fish. The fast-breeding
alien species, though pop-
ular as food in parts of
Asia, is not as desirable
as the fishes it is displac-
ing in Florida. Its con-
tinued spread poses a
threat to the fresh-water
ecology of a wide area.

Being a fish, *Clarias* prefers to remain moist. This is probably why it walks mostly at night and during periods of rain.

Sometimes the newcomers move across land in large numbers. At least one such migration was reported last fall when a bartender saw "hundreds" of them north of Fort Lauderdale, slithering across a road at 2 a.m. He caught three of them and reported the incident to biologists of the Florida Game and Fresh Water Fish Commission, who found five or six more on the road the next day, crushed by passing cars.

Clarias Drives Out Native Bass

Two of these biologists, Vernon Ogilvie and Robert Goodrick, have conducted research on *Clarias* for the state; both are deeply concerned about its threat to native aquatic life.

Mr. Ogilvie has drawn the wrath of some fish dealers and aquarists by declaring the walking catfish "a disaster," and "extremely frightening" to him as an ecologist. Not long ago I talked to him at his laboratory in West Palm Beach.

"In some bodies of water close to the original area of infestation," he said, "*Clarias* is now the dominant fish. There is no doubt that it has shouldered out the native fishes."

I got the same story from Dr. Walter R. Courtenay, Jr., ichthyologist at Florida Atlantic University in Boca Raton.

"In almost any place where a concentration of walking catfish is found," he told me, "little else remains except a few small fish called sleepers. The catfish have displaced valuable game fishes like largemouth bass, as well as panfishes such as bluegills, shellcrackers, and warmouths. In one pond no bigger than my living room, I caught 65 of these new catfish in two hauls of a seine, and it seemed there were hundreds more."

The walking catfish is exhibiting a classic response to introduction into a new environment. Without the biological checks and balances that control animal—and even plant—populations in their native lands, exotic species often multiply exuberantly, sometimes completely displacing indigenous forms. Moreover, they often bring new diseases and parasites. With *Clarias*, Florida is again the loser, as it was with the water hyacinth, introduced from South America in 1884 and now throttling the state's waterways.

Worse, I believe, is yet to come. It appears certain that *Clarias* will spread farther, and that it will take over many ponds, canals, and lakes. Its equipment and its behavior virtually guarantee this. The south Florida water area is an enormously intricate complex of shallow lakes and ponds joined by drainage canals and natural channels, and it is periodically flooded in the rainy season. Populations of native fishes and other aquatic animals are greatly depleted during drought when many ponds and marshes go completely dry and water levels in the canals are greatly reduced.

But *Clarias* has the advantage of being able to breathe air when waters are low, and even to lie buried in the mud in extreme conditions. Or, better still, it can trek off across country to other ponds or canals, leaving its native competitors to perish, though its primary motivation for walking on land seems to be to seek food.

Clarias apparently reproduces very rapidly. It is definitely breeding successfully in Florida, where it spawns through much of the year.

The walking catfish is viciously aggressive. Even the famous "man-eating" piranha avoids an adult *Clarias* when put in the same tank. Photographer Bob Sisson watched an "unbelievably ferocious" attack by a 13-inch walking catfish on a 7¾-inch bullhead, one of the native catfishes, which it eventually killed (opposite).

"*Clarias* has already gotten into Lake Okeechobee, and I'm holding my breath for what will happen when it reaches Everglades National Park," Vernon Ogilvie told me. "It may have disastrous consequences."

Both he and Walter Courtenay believe the catfish will spread at least to central Florida. Mr. Ogilvie thinks Georgia, Alabama, and even Tennessee may not be exempt. Colder climate will presumably keep the fish from moving farther north than that.

But walking catfish are in Florida to stay. Last November the Game and Fresh Water Fish Commission reluctantly gave up ideas of trying to eradicate them, concluding that they were already too widespread.

Besides, as Vernon Ogilvie said sadly, "How do you kill a fish that simply walks away when you poison its pond?"

THE END

SENATE FISH AND GAME

EXHIBIT NO.

DATE

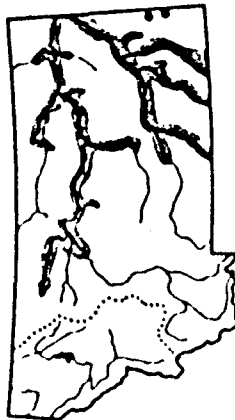
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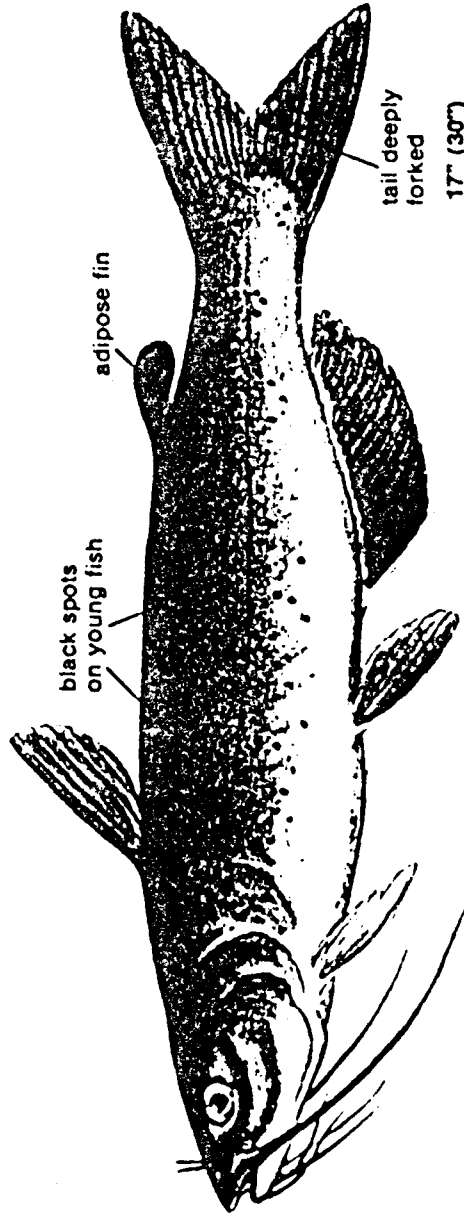
CATFISH FAMILY

This family is characterized by scaleless fishes with long "cat's whiskers" (barbels) and an adipose fin.

CHANNEL CATFISH *Ictalurus punctatus*



Native. HABITAT: Prefers large rivers and lowland lakes. Tolerates turbid water. SIMILAR SPECIES: (1) Other Montana members of the catfish family do not have a deeply forked tail. (2) See Burbot.



black spots
on young fish

adipose fin

tail deeply
forked
17" (30")

SENATE FISH AND GAME

EXHIBIT NO. 4A PAGE

DATE 3-5-57

BILL NO. HB 93

Sen. Bengsten

G=Game Fish

LIST OF MONTANA FISHES as of October, 1986

SENATE FISH AND GAME

EXHIBIT NO. 5

DATE 3-5-87

BILL NO. HB 93

<u>Common Name</u>	<u>Scientific Name</u>
G White sturgeon	<u>Acipenser transmontanus</u>
G Pallid sturgeon	<u>Scaphirhynchus albus</u>
G Shovelnose sturgeon	<u>Scaphirhynchus platyrhynchus</u>
G Paddlefish	<u>Polyodon spathula</u>
Shortnose gar	<u>Lepisosteus platostomus</u>
Goldeye	<u>Hiodon alosoides</u>
G *Cisco or lake herring	<u>Coregonus artedii</u>
G * Lake whitefish	<u>Coregonus clupeaformis</u>
G Pygmy whitefish	<u>Prosopium coulteri</u>
G Mountain whitefish	<u>Prosopium williamsoni</u>
G * Kokanee	<u>Oncorhynchus nerka</u>
G * Chinook salmon	<u>Oncorhynchus tshawytscha</u>
G * Coho Salmon	<u>Oncorhynchus kisutch</u>
G * Golden trout	<u>Salmo aguabonita</u>
G Yellowstone cutthroat trout	<u>Salmo clarki bouvieri</u>
G Westslope cutthroat trout ^{1/}	<u>Salmo clarki lewisi</u>
G * Rainbow trout ^{2/}	<u>Salmo gairdneri</u>
G * Atlantic Salmon	<u>Salmo salar</u>
G * Brown trout	<u>Salmo trutta</u>
G Bull trout	<u>Salvelinus confluentus</u>

<u>Common Name</u>	<u>Scientific Name</u>	
G * Brook trout	<u>Salvelinus fontinalis</u>	
G Lake trout	<u>Salvelinus namaycush</u>	SENATE FISH AND GAME
G Arctic grayling	<u>Thymallus arcticus</u>	EXHIBIT NO. <u>5 - page 2</u>
		DATE <u>3-5-87</u>
		S.I. <u>HB-75</u>
*Rainbow smelt	<u>Osmerus mordax</u>	
G * Northern pike	<u>Esox lucius</u>	
* Goldfish	<u>Carassius auratus</u>	
Lake chub	<u>Couesius plumbeus</u>	
* Common carp	<u>Cyprinus carpio</u>	
* Utah chub	<u>Gila atraria</u>	
Western silvery minnow	<u>Hybognathus argyritis</u>	
Brassy minnow	<u>Hybognathus hankinsoni</u>	
Plains minnow	<u>Hybognathus placitus</u>	
Sturgeon chub	<u>Hybopsis gelida</u>	
Flathead chub	<u>Hybopsis gracilis</u>	
Sicklefin chub	<u>Hybopsis meeki</u>	
Peamouth	<u>Mylocheilus caurinus</u>	
* Golden shiner	<u>Notemigonus crysoleucas</u>	
Emerald shiner	<u>Notropis atherinoides</u>	
Spottail shiner	<u>Notropis hudsonius</u>	
Sand shiner	<u>Notropis stramineus</u>	
Northern redbelly dace	<u>Phoxinus eos</u>	
N. Redbelly-finescale dace hybrid	<u>Phoxinus eos</u> X <u>Phoxinus neogaeus</u>	
Fathead minnow	<u>Pimephales promelas</u>	

Common Name

Scientific Name

* Mosquitofish
* Sailfin Molly
* Shortfin molly
* Green swordtail
* Variable platyfish

Gambusia affinis
Poecilia latipinna
Poecilia mexicana
Xiphophorus helleri
Xiphophorus variatus

SENATE FISH AND GAME

EXHIBIT NO. 5 - page 3

DATE 3-5-87

BILL NO. HB-93

Brook stickleback

Culaea inconstans

* White bass

Morone chrysops

* Rock bass

Ambloplites rupestris

* Green sunfish

Lepomis cyanellus

* Pumpkinseed

Lepomis gibbosus

* Bluegill

Lepomis macrochirus

G * Smallmouth bass

Micropterus dolomieu

G * Largemouth bass

Micropterus salmoides

* White crappie

Pomoxis annularis

* Black crappie

Pomoxis nigromaculatus

Iowa darter

Etheostoma exile

* Yellow perch

Perca flavescens

G Sauger

Stizostedion canadense

G * Walleye

Stizostedion vitreum

Common NameScientific Name

Northern squawfish	<u>Ptychocheilus oregonensis</u>
Longnose dace	<u>Rhinichthys cataractae</u>
Redside shiner	<u>Richardsonius balteatus</u>
Creek chub	<u>Semotilus atromaculatus</u>
Pearl dace	<u>Semotilus margarita</u>
River carpsucker	<u>Carpiodes carpio</u>
Longnose sucker	<u>Catostomus catostomus</u>
White sucker	<u>Catostomus commersoni</u>
Largescale sucker	<u>Catostomus macrocheilus</u>
Mountain sucker	<u>Catostomus platyrhynchus</u>
Blue sucker	<u>Cycleptus elongatus</u>
Smallmouth buffalo	<u>Ictiobus bubalus</u>
Bigmouth buffalo	<u>Ictiobus cyprinellus</u>
Shorthead redhorse	<u>Moxostoma macrolepidotum</u>
* Black bullhead	<u>Ictalurus melas</u>
* Yellow bullhead	<u>Ictalurus natalis</u>
G Channel catfish	<u>Ictalurus punctatus</u>
Stonecat	<u>Noturus flavus</u>
Trout-perch	<u>Percopsis omiscomaycus</u>
G Burbot	<u>Lota lota</u>
Plains killifish	<u>Fundulus zebrinus</u>

SENATE FISH AND GAME

EXHIBIT NO. 5 page 4DATE 3-5-87BILL NO. HB 93

Common Name

Scientific Name

Freshwater drum

Aplodinotus grunniens

Mottled sculpin

Cottus bairdi

Slimy sculpin

Cottus cognatus

Shorthead sculpin

Cottus confusus

Torrent sculpin

Cottus rhotheus

Spoonhead sculpin

Cottus ricei

SENATE FISH AND GAME

EXHIBIT NO. 5 page 5

DATE 3-5-87

BILL NO. HB 93

* Not native

^{1/} Includes upper Missouri cutthroat trout

^{2/} There are a few native rainbow in the Kootenai River Drainage

- all other populations originated from hatchery fish.

HB 131
March 5, 1987

SENATE FISH AND GAME
EXHIBIT NO. 6
DATE 3-5-87
BILL NO. HB 131

Testimony presented by Jim Flynn, Dept. of Fish, Wildlife & Parks

In general, the Department of Fish, Wildlife & Parks produces only enough eggs to supply its own requirements, plus those we use for trading with other state or federal hatcheries. Occasionally we have surplus eggs, which normally are destroyed.

These eggs could be made available for sale to private operators, with some suggested restrictions. The department does not want private hatcheries to develop a dependency on us as an egg source supplier. We would prefer that eggs be purchased from in-state private hatcheries when a disease-free source is available. In the event eggs from private sources are unavailable, and depending upon a surplus from our agency, we should have the authority to sell them.

We would not sell surplus eggs when sufficient disease-free eggs are available from private sources in-state.

We support this bill.

**Montana Department
of
Fish, Wildlife & Parks**



M E M O R A N D U M

TO: Ron Marcoux

DATE: March 13, 1987

FROM: Thurston Dotson

SUBJECT: State Operated Fish Hatcheries and Fish Reared

Hatchery

Washoe Park Trout Hatchery
Anaconda, MT
Jocko River Trout Hatchery
Arlee, MT

Bluewater Springs Trout Hatchery
Bridger, MT

Big Springs Trout Hatchery
Lewistown, MT

Giant Springs Trout Hatchery
Great Falls, MT

Miles City Fish Hatchery
Miles City, MT

Murray Springs Trout Hatchery
Eureka, MT

Yellowstone River Trout Hatchery
Big Timber, MT

Flathead Lake Salmon Hatchery
Somers, MT

Fish Reared

Westslope cutthroat
(brood), Rainbow
Arlee rainbow (brood)

Rainbow, Chinook salmon
and some Yellowstone
cutthroat

Rainbow, Brown trout,
Kokanee salmon and
Yellowstone cutthroat

Rainbow, Yellowstone
cutthroat, Kokanee salmon

Walleye, Northern pike,
Large and Smallmouth
bass, Channel catfish

Rainbow, Westslope
cutthroat and Kokanee
salmon

Yellowstone cutthroat
(brood)

Kokanee salmon egg
collection and rearing

SENATE FISH AND GAME

EXHIBIT NO. 87

DATE 3-5-87

BILL NO. _____

US FISH AND WILDLIFE SERVICE HATCHERIES IN MONTANA

Ennis National Fish Hatchery
Ennis, MT

Several strains of
Rainbow brood stock

Creston National Fish Hatchery
Kalispell, MT

Westslope cutthroat,
Brook trout, Rainbow

Fish Technology Center
Bozeman, MT

Development Center,
dealing with all
salmonids and some warm
water species

asw

COMPARISON OF NONRESIDENT LICENSE COSTS

<u>TYPE OF LICENSE</u>	<u>CO</u>	<u>ID</u>	<u>WY</u>	<u>MT</u>
Elk	\$210.00	\$235.50	\$255.00	\$ --
Deer	120.00	90.50	105.00	100.00
Bear	210.00	40.50	55.00	100.00
Bird	25.00	--	30.00	30.00
Fishing	35.00	35.50	35.00	35.00
Prerequisite	--	85.50*	--	350.00**
TOTAL	<u>\$600.00</u>	<u>\$487.50</u>	<u>\$480.00</u>	<u>\$350.00**</u>

* Includes a Bird License

** Combination License Price

WESTERN STATES
PROPOSED COST TO HUNT COMPARISONS
AT 01/01/87
AS OF 01/01/86

RESIDENT

STATE/TAG	DEER	ELK	BEAR	TURKEY	MTN LION	MOOSE	ANTELOPE	SHEEP	MTN GOAT	SMALL GAME
AZ	\$24.00	\$69.50	\$17.00	\$18.00	\$11.00		\$59.50	\$159.50		\$9.50
CA	\$28.50	\$183.50	\$33.50	\$18.50			\$73.50			\$18.50
CO	\$17.00	\$25.00	\$25.00	\$7.50	\$32.00	\$200.00	\$17.00	\$100.00	\$100.00	\$7.50
ID	\$14.50	\$20.50	\$13.00	\$13.00	\$17.00	\$67.00	\$33.50	\$67.00	\$67.00	\$6.50
MT	\$11.00	\$12.00	\$10.00	\$5.00	\$12.00	\$52.00	\$8.00	\$52.00	\$52.00	\$4.00
NV	\$30.00	\$90.00			\$30.00		\$45.00	\$90.00	\$90.00	\$15.00
NM	\$21.00	\$40.00	\$11.25	\$11.25	\$11.25		\$21.00	\$35.00		\$11.00
OR	\$14.00	\$24.00	\$13.00	\$12.00	\$28.00		\$18.00	\$33.00		\$10.00
UT	\$15.00	\$45.00	\$40.00	\$18.00	\$40.00	\$115.00	\$40.00	\$215.00	\$215.00	\$12.00
WA	\$27.00	\$32.00	\$27.00	\$27.00	\$32.00	\$162.00		\$87.00	\$62.00	\$20.00
WY	\$20.00	\$30.00	\$15.00	\$11.00	\$25.00	\$55.00	\$20.00	\$55.00	\$55.00	\$10.00
AVERAGE	\$20.18	\$51.95	\$20.47	\$14.12	\$23.82	\$108.50	\$33.55	\$89.35	\$91.57	\$11.27
MAX	\$30.00	\$183.50	\$40.00	\$27.00	\$40.00	\$200.00	\$73.50	\$215.00	\$215.00	\$20.00
MIN	\$11.00	\$12.00	\$10.00	\$5.00	\$11.00	\$52.00	\$8.00	\$33.00	\$52.00	\$4.00

NON RESIDENT

STATE/TAG	DEER	ELK	BEAR	TURKEY	MTN LION	MOOSE	ANTELOPE	SHEEP	MTN GOAT	SMALL GAME
AZ	\$131.00	\$355.50	\$106.00	\$106.00	\$106.00		\$305.50	\$805.50		\$25.00
CA	\$224.50	\$224.50	\$164.50	\$59.50			\$114.50			\$59.50
CO	\$120.00	\$210.00	\$100.00	\$50.00	\$185.00		\$120.00	\$500.00	\$500.00	\$32.50
ID	\$186.00	\$336.00	\$136.00	\$111.00	\$236.00	\$1086.00	\$186.00	\$1086.00	\$1086.00	\$45.50
MT	\$102.00	\$352.00	\$102.00	\$5.00	\$302.00	\$302.00	\$102.00	\$302.00	\$302.00	\$32.00
NV	\$180.00				\$205.00		\$330.00	\$580.00		\$80.00
NM	\$147.00	\$305.50	\$212.00	\$150.00	\$372.00		\$305.50	\$388.50		\$57.50
OR	\$150.00	\$187.00	\$150.00	\$79.00	\$225.00		\$200.00			\$50.00
UT	\$120.00	\$220.00	\$150.00	\$43.00	\$250.00	1120.00	\$220.00	1120.00		\$40.00
WA	\$175.00	\$225.00	\$275.00	\$140.00	\$425.00	\$425.00		\$425.00	\$275.00	\$133.00
WY	\$105.00	\$255.00	\$55.00	\$30.00	\$105.00	\$305.00	\$105.00	\$405.00	\$505.00	\$30.00
AVERAGE	\$149.13	\$267.05	\$145.05	\$77.35	\$241.10	\$647.60	\$198.85	\$623.55	\$533.60	\$53.18
MAX	\$224.50	\$355.50	\$275.00	\$150.00	\$425.00	1120.00	\$330.00	1120.00	\$1086.00	\$133.00
MIN	\$102.00	\$187.00	\$55.00	\$5.00	\$105.00	\$302.00	\$102.00	\$302.00	\$275.00	\$25.00

1. California: Prices effective 7/1/86.
2. Idaho: Nonresident 2 day upland game license not valid during first 5 days of pheasant season.

\$352.00 FOR mt includes ELK, DEER, BIRDS, BEAR
Fishing AND Conservation
License.

STANDING COMMITTEE REPORT

March 5

37

..... 19.....

MR. PRESIDENT

Fish and Game

We, your committee on

having had under consideration..... House Bill..... No. 64.....

Third reading copy (Blue)
color

BOW HUNTER COMPETENCY TRAINING

Representative Marian Hanson (Senator William Yellowtail)

House Bill

64

Respectfully report as follows: That..... No.....

be amended as follows:

1. Title, line 7.

Following: "AND"

Insert: "INCREASING THE BOW AND ARROW LICENSE FEE BY \$1; AND"

Strike: "SECTION"

Insert: "SECTIONS"

2. Title, line 8.

Following: "~~87-2-708~~"

Insert: "AND 87-2-708"

3. Page 3.

Following: line 22

Insert: "Section 2. Section 87-2-708, MCA, is amended to read:
"87-2-708. Class A-2--special bow and arrow license. A holder of a valid hunting license for which a special archery season is set by the department may receive, upon payment of an additional fee of \$6 \$7, a Class A-2 license which shall authorize the holder thereof to pursue, hunt, shoot, and kill with bow and arrow the game animals so authorized by the licenses held and to possess the carcass thereof during seasons and in areas, as designated by the department.""

Renumber: subsequent sections

XBXKX66X

AND AS AMENDED
BE CONCURRED IN

XBXKXKX66X

Senator Ed Smith

Chairman.

STANDING COMMITTEE REPORT

March 5 19 37

MR. PRESIDENT

We, your committee on FISH AND GAME

having had under consideration HOUSE BILL No. 93

Third reading copy (Blue)
color

ALLOW TAKING OF CATFISH WITH LONGBOW AND ARROW

Representative Marian Hanson (Senator Judy Jacobson)

HOUSE BILL

93

Respectfully report as follows: That No.

~~DO NOT PASS~~

BE CONCURRED IN

~~DO NOT PASS~~

Senator Ed Smith

Chairman.

STANDING COMMITTEE REPORT

MARCH 5

19⁸⁷

MR. PRESIDENT

We, your committee on Fish and Game

having had under consideration HOUSE BILL No. 131

Third reading copy (Blue)
color

DEPARTMENT OF FISH, WILDLIFE, AND PARKS' AUTHORITY TO SELL
EXCESS FISH EGGS

Representative Orval Ellison (Senator Greg Jergeson)

Respectfully report as follows: That HOUSE BILL No. 131

~~XXXXXXXXXX~~
~~SECRET~~

BE CONCURRED IN

~~XXXXXXXXXX~~

Senator Ed Smith

Chairman.