

## FISH

Status: Common, Introduced

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# COMMON CARP

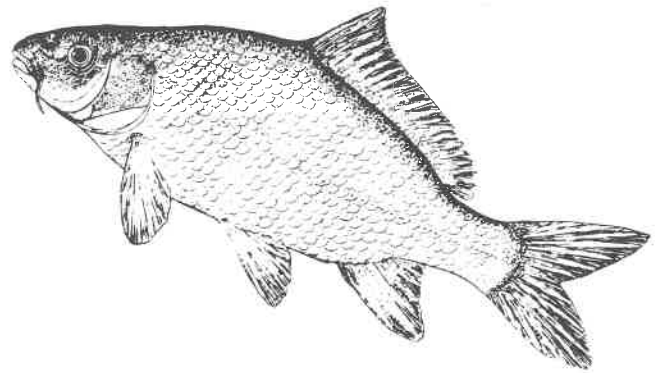
(*Cyprinus carpio*)

## Description

The common carp, the largest member of the minnow family found in South Dakota, is not native to North America. Carp hatch from tiny eggs less than 0.4 inches (1 mm) in diameter and grow to a weight of 33 pounds (15 kg) and a length of 40 inches (1 meter) in 5 to 6 years. They can live for over 20 years. Carp have stocky bodies, large scales, and range in color from dark olive bronze on the top of the back to lighter silvery yellow on the belly. The color intensity varies to blend with the color of the water or the habitat background. The tail is forked with rounded lobes. The *dorsal* and *ventral* fins have a stiff-barbed spine at the front followed by soft flexible *rays*. Carp have numerous rows of small bones within the major muscle groups of the back and sides. They have good eyesight and are sensitive, like all fish, to sound, and disturbances in or near the water. They have sensitive smell/taste organs in and around the snout that assist in feeding. They are sight and smell feeders, eating insects, seeds, and other small organisms and plants in clear water, and relying on their sensitive sense of smell to locate food in turbid waters. The mouth and lips are adapted to extend like a short tube for sucking up food.

## Distribution

Carp are abundant in most of the warm water lakes and slow moving streams of South Dakota. The species, a native of



Asia, was widely introduced in Europe. They were intentionally introduced to this country by the United States Fish Commission in the late 1880's, being heralded as a new sport and food fish. Hardy and prolific breeders, carp spread from these initial stockings into all of the interconnected waterways of South Dakota. They have accidentally invaded lakes and ponds along with stockings of other fish or live bait. They are now well established throughout the state.

## Natural History

Carp prefer slow moving rivers and streams and warm lake habitats with abundant vegetation. They feed on a wide variety of plant and animal food items from the waters surface, from vegetation and rocks, and from stream and lake bottoms. Shallow sloughs and marshes, adjacent to stream channels or lakes, are preferred breeding habitats. Spawning is triggered in the spring by

warming water temperatures and increasing day length, peaking at 62.6°F (17°C). The *fecundity* per female varies with the size of the fish from 36,000 to over two million eggs for a large adult. The females deposit their adhesive eggs on aquatic plants or submerged brush as several males cluster around and distribute *milt* into the surrounding water to fertilize them. The *fry* hatch in three to six days. These 0.39 inch (10 mm) juvenile fish feed on *plankton*, at first, moving to larger and larger food items as they grow.

## Significance

Carp are destructive, non-native fish. Carp are omnivorous (eating both plants and animals), their bottom feeding habits causing great destruction of aquatic resources. They compete heavily with diving ducks, such as canvasbacks, for submerged plants. Carp of all sizes compete with native *fauna* for aquatic food, and destroy the nests and eat the eggs of other spawning fish. They stir up silt and degrade the water quality resulting in loss of other more desirable fish and animals.

Juvenile carp do provide *forage* for game fish, but quickly grow too large for this purpose. Although carp provide good action when caught on rod and reel, they are not classified as a sport fish and are difficult to catch much of the year. Their bony structure and often muddy tasting flesh reduce their desirability as a food fish.

## Conservation

The presence of carp in nearly all of our rivers, streams, and reservoirs is a constant reminder that our environment is a complex relationship among all habitats and organisms. The introduction of any non-native organism may have tremendous impacts on these habitats. It is seldom possible to eradicate an organism once it gets established. We must support our management agencies in maintaining strict and well enforced regulations regarding the introduction of *exotic* organisms to any of our habitats. Only after exhaustive research and evaluation should these introductions be allowed. Carp have compromised the conservation of most of our clear water aquatic plants and animals, with little benefit in return.

## Glossary

- Dorsal**- back or top side.  
**Exotic** - not native to the place they are found.  
**Fauna**- animals.  
**Fecundity**- number of eggs.  
**Forage**- food organisms.  
**Fry**- small juvenile fish usually less than 3" long.  
**Milt**- white milky fluid containing sperm.  
**Plankton**- microscopic plants and animals found in water.  
**Rays**- stiff but flexible cartilaginous spines in a fin.  
**Ventral**- belly or bottom side.

## References

Eddy, Samuel, and James C. Underhill, How to Know the Freshwater Fishes. William C. Brown Company Publishers, Dubuque, Iowa.

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