Fish SD: Attract a Fish

Background: Review Chapters 2: *Fishing Equipment*, 4: *Fishing Techniques*, 5: *Fish Identification and Life History* and 6: *Fish Anatomy* in Going Fishing

Duration: Part 1: 30-45 minutes; Part 2: 30-45 minutes

Materials: Fish anatomy poster, fishing catalogs, printed images of: catfish, bluegill, crappie and bass, printed identification and habitat cards, fishing

Objectives: Participants will identify four South Dakota sport fish species, describe habitat preferences and identify appropriate bait and fishing techniques.

Preparation: You may choose to divide your class into groups for this activity. For each group, print a copy of the fish images and print and fold a set of identification cards. The cards should be folded in quarters so that the identifying characteristics are on the front of the card and the fish's name and behavioral characteristics are inside the card. Tape the cards closed and instruct students not to open the cards. (KEY: Species #1 = bluegill, Species #2 = black crappie, Species #3 = channel catfish, Species #4 = largemouth bass)

Warm up: Discuss why it is important to know about the fish you want to catch before you go fishing.

Activity:

Part I:

Using the characteristics listed on the front of the ID cards, have each group of students match the cards to the appropriate fish image. Once all cards have been matched and before opening the cards to check their answers, start a discussion with the students about what they expect each fish to eat and what habitats the fish might occupy. Use cues like the shape of the fish, the coloration & patterns, and the shape of the mouth to inform your guesses. Record student's observations on a whiteboard. Once the discussion wraps up, open the cards to check your answers. Discuss the habitat and diet information on the cards.

Part 2:

Use the fishing catalogs to select an appropriate bait or lure to use for each species. Discuss fishing techniques for each species. The habitat and diet information listed on the cards should inform the students' selections. Example of questions to guide the discussion:

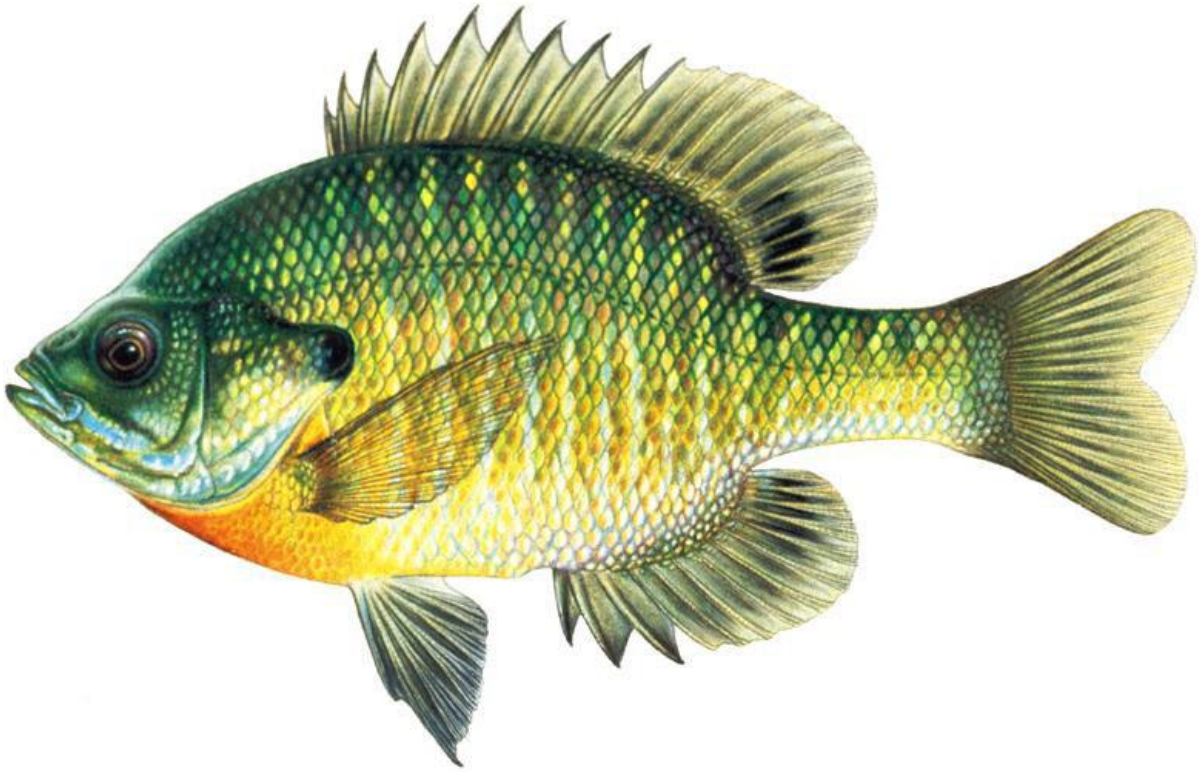
If you plan to fish for bluegill, what would you look for when you get to the lake?

Would you fish with or without a bobber to catch a catfish?

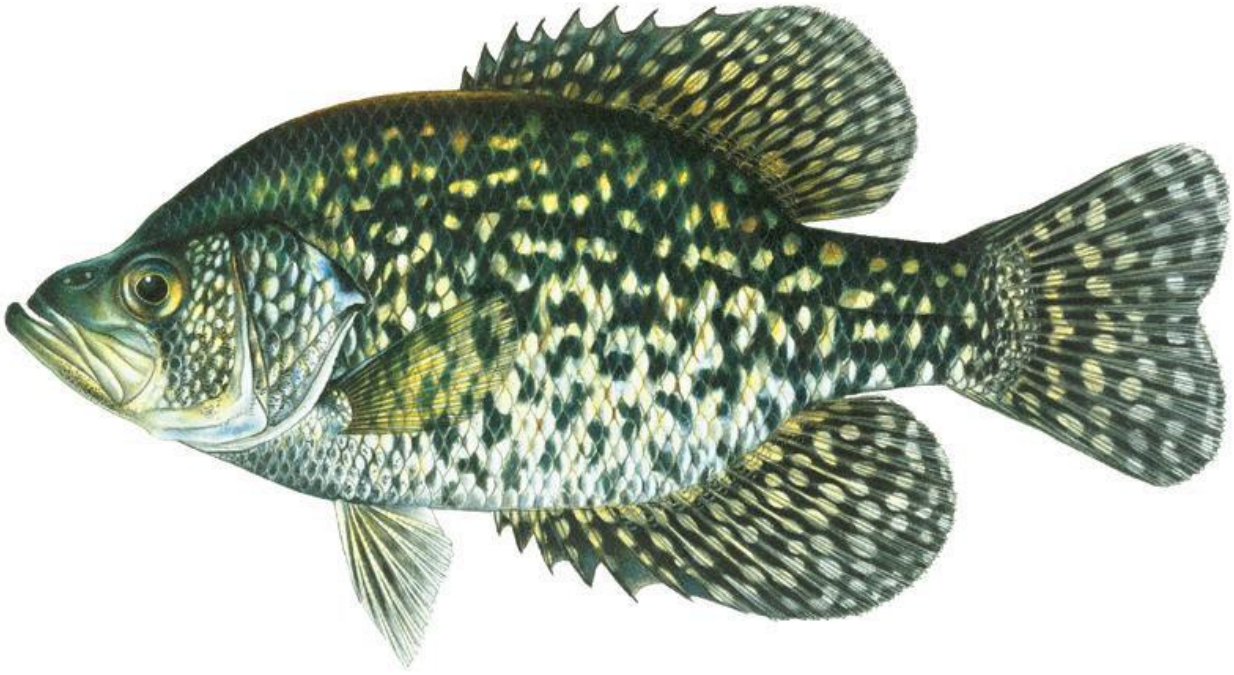
To fish for bluegill, what are some habitats you would look for when you choose a place to cast your line?

Wrap up: Continue the discussion by asking students to brainstorm other ways to fish for these species. Identify some other fish species that you could catch with the lures and baits selected for these species.

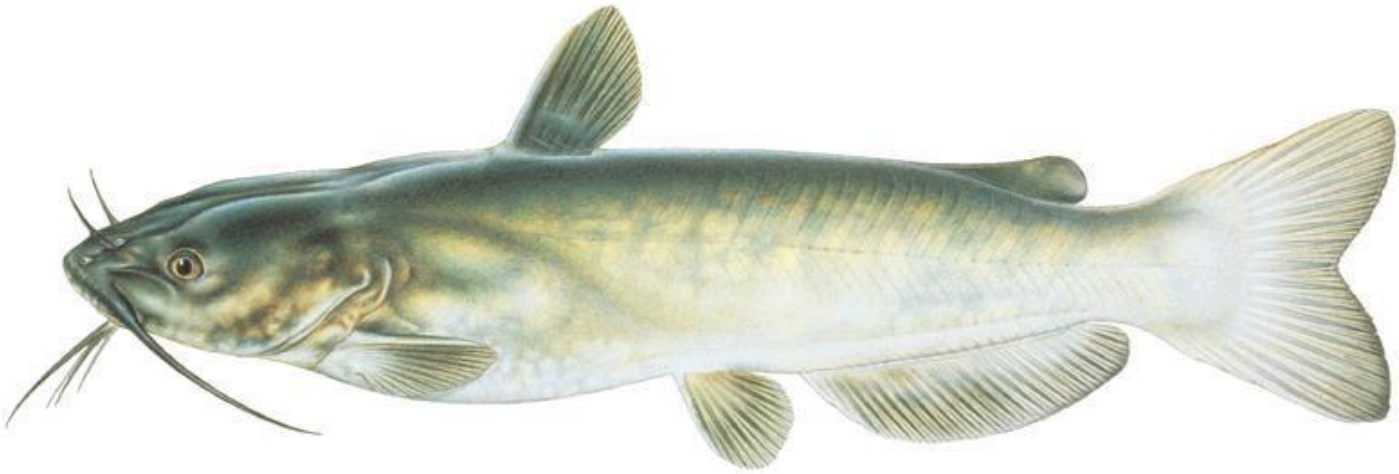
SPECIES #1



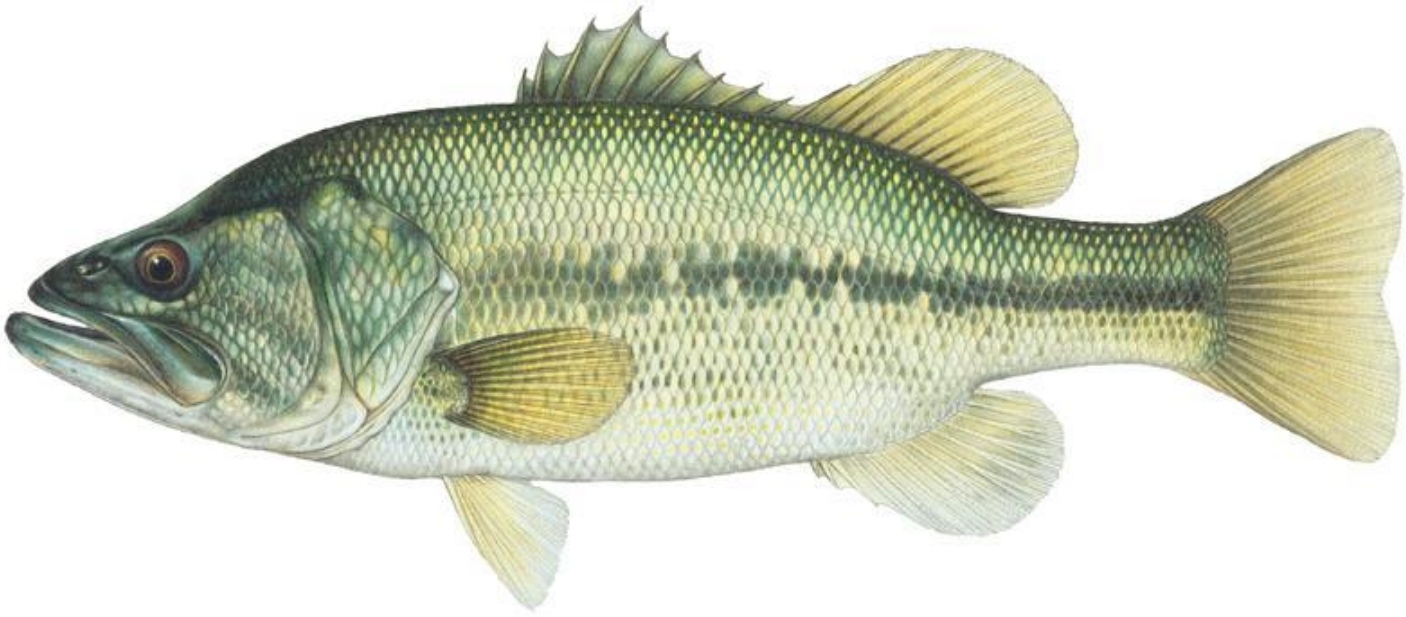
SPECIES #2



SPECIES #3



SPECIES #4



Identification:

- Deep-bodied, slab-sided
- Large mouth extends to middle of eye, but not beyond eye
- Dorsal coloration is dark-olive, with silvery white sides
- Dark markings on sides either arranged in vertical bars or in irregular blotches
- Spots on anal, dorsal, and tail fins
- Anal-fin is nearly as long as the dorsal fin
- Black crappie has 7-8 spines on the dorsal fin
- White crappie has 5-6 spines on the dorsal fin

Habitat:

- Rocky areas, coves with brushpiles, flooded trees
- During spawning in the spring, adults are found in shallower water
- After spawn, adults can be found in deeper water

Diet:

- Primarily small fish. Also feeds on aquatic insects and crustaceans (especially when young)

Activity:

- Congregates in loose aggregations about submerged trees, boat docks, and other cover
- Fairly sedentary
- Active feeding in the evening and morning, sometimes near the surface
- Will feed during the day in deeper water

Identification:

- Slender bodied (body depth is 3 times or more the length of body), streamlined
- Very large gape (mouth extends well past the back of the eye)
- Dorsal fin almost completely separated into two parts: spiny dorsal and soft dorsal (soft dorsal has only cartilaginous rays and no spines)
- Dark horizontal stripe on the mid-side of the body
- Dorsal markings are green, lower sides and belly are white
- Adults can grow larger than other sunfishes.
- Males are territorial and fiercely guard nests.

Habitat:

- Flooded timber, brushpiles, at the edge of underwater ledges and drop-offs into deeper water
- Largemouth bass are sight feeders, and are most successful at finding prey in clear water

Diet:

- Primarily feeds on other fish (piscivorous)
- Also feeds on crayfish, large insects, frogs, anything that falls in the water or swims and will fit into its mouth

Activity:

- Spends the day in deeper water, lurking about logs, drift piles and other cover
- Moves into the shallows in morning and evening to feed.
- Will feed during the day in deeper water

Identification:

- Elongate, slender bodied
- Smooth, scaleless skin
- Sensory barbels around the mouth
- Small, fatty tissued adipose fin near the tail fin
- Deeply forked tail fin
- Olive-brown to slate-blue coloration with white bellies
- Smaller fish have black spots on sides

Habitat:

- Occupies a variety of habitats, but can be located underneath structure (fallen trees, cavities in rock piles)
- Relies on taste rather than sight for feeding, so is tolerant of turbid (murky) water

Diet:

- Diet is varied depending on what is most available, includes fish, insects, crayfish, mollusks, and plant material
- Most food is taken from the bottom
- Will feed on decomposing organic matter (dead fish, dead plants, etc.)

Activity:

- Primarily active at night. During daylight hours, will hide in natural cavities or remain sedentary in deeper pools.

ntification:

Deep bodied (body depth is < 3 times the length of the body)
Small mouth (mouth does not extend back to the eye)
Dark spot near the base of the soft dorsal fin
Dark spot on the ear flap of the operculum
Vertical bars on sides of body
Olive-green with emerald and brassy reflections
Spawning male belly yellow or reddish orange

Habitat:

- Clear water that can support plant life is important to bluegill survival. Submerged vegetation provides cover for bluegill to hide from predators as well as habitat for aquatic insects
- Seeks submerged vegetation and can be found near underwater structures like flooded timber and brushpiles
- Prefers shallow water habitat where there is light penetration

Diet:

- Aquatic insects and aquatic nymphs of terrestrial insects (example: caddisfly, dragonfly, mayfly) Also will prey on small fish, crayfish, snails

Activity:

- Fairly sedentary; sunfish spend much of their time hovering quietly near submerged cover or in the shade of trees.
- In morning and evening, feeds in shallows
- Feeds by sight by foraging at the surface, mid-water, and the substrate