

# WILD TIMES



KIDS MAGAZINE

SUMMER 2020

## INSIDE:

- Stocking fish with helicopters
- Which species of wildlife live in the sagebrush?
- How to fish in hot weather



ACTIVITIES | LESSONS | INFORMATION | FUN

# HABITAT CONNECTION



Two male sage grouse strut in the sagebrush, the most important plant in the bird's ecosystem.

## THE SAGEBRUSH SEA

**T**he wide-open Wyoming sagebrush plains may look like empty country where only wind moves, but many different animals rely on sagebrush to survive. The sagebrush helps other plants grow, tying down the soil with its roots and giving smaller plants shade from the hot sun. Sagebrush can live over 100 years, turning green every spring and storing nutrients in its roots that can reach 6 feet below the dirt--that is taller than many humans!

Keep an eye out for these critters next time you are in sagebrush country. Everything from big game to lizards live in the sage:

- One of the most well-known animals that calls the sagebrush home is the greater sage grouse, known for its springtime breeding dance.
- It's always a treat to see a swift fox, a very small species about the size of a housecat.
- Burrowing owls don't actually dig a burrow themselves; they use leftover burrows from badgers or prairie dogs.

- Pronghorn live in sagebrush country year-round, while mule deer are usually pushed from the mountains into the sagebrush basins in the winter.
- Small mammals, including sagebrush voles, pygmy rabbits, olive-backed pocket mice and the pallid bat, call the high desert home.
- Birds include the mountain plover, Brewer's sparrow, loggerhead shrike, lark bunting, sage thrasher and sagebrush sparrow. Ferruginous hawks and golden eagles can be spotted scanning for their next meal.
- Spadefoot toads, short-horned lizards, sagebrush lizards, tiger salamanders and prairie rattlesnakes round out the amphibian and reptile residents.

During the summer, most animals are active at night to avoid the hot daytime sun. All the plants and animals in the sagebrush ecosystem are hardy to survive large changes in temperatures, hard-to-find water and ever-present wind.

# FIELD JOURNAL



A helicopter stocks a lake high in the Snowy Range mountains in southeast Wyoming.

## HELICOPTER FISH STOCKING

If you are camping this summer near a high-mountain (also called alpine) lake, you might be lucky enough to hear the sound of a helicopter overhead. It could be that the Wyoming Game and Fish Department is stocking fish in that nearby lake!

Many lakes have wild fish that reproduce naturally so Game and Fish doesn't need stock fish to keep the population steady. However, some lakes are stocked with fish that were raised at a hatchery so that anglers can enjoy fishing there.

Stocking fish in the mountains is very hard because some lakes are difficult to get to. In the past, fish were stocked in these backcountry lakes on horseback using large metal buckets filled with water and fish. The trip could take several hours or even days to reach just one lake. This way was stressful on the fish because the longer the trip takes, the warmer the water gets for the fish, and the less oxygen they have to breathe. Before helicopter stocking, the water the fish traveled in sometimes needed to be changed several times on one trip.

Starting in 1970, the Game and Fish started to use helicopters to stock in hard-to-reach lakes. It is faster, saves money and more fish survive. Helicopter

stocking starts in August since most alpine lakes are at a high elevation, and late summer is the only time they are ice-free. Wilderness lakes are stocked every two years around the state.

### HERE IS HOW IT WORKS:

1. Fish are loaded into a tank with eight separate cylinders. This tank hangs beneath the helicopter.
2. The pilot takes off and travels to the waters he or she plans to stock.
3. When in the right position hovering over the lake, about 10 feet above the water.
4. The pilot opens the individual cylinders using controls in the cockpit.
5. Fish drop out of the tank along with a lot of water. This is so the fish don't "belly flop" into the lake. With the water, they glide in easily.

The number of fish stocked in a lake depends on the size of the lake, but it is usually around 1,000. Fish are usually dropped from about 10 feet above the water. Multiple lakes can be stocked in one flight.

See a video of helicopter fish stocking at: <https://youtu.be/HHbOE6VOcSA>



# WILDLIFE PROFILES



Catching a golden trout is as special as finding treasure in the high country.

## Golden Trout (*Oncorhynchus aguabonita*)

**Range:** The golden trout is native to some streams in the southern Sierra Nevada mountains of California. They have been introduced in many states throughout the western Rockies, including Wyoming.

**Size:** In their native habitat, adults range from 6 to 12 inches, but in Wyoming large adults can easily measure more than 15 inches.

**Habitat:** The golden trout is commonly found at elevations from 6,890 feet to 10,000 feet above sea level in their native range, and can be found over 12,000 feet elevation in introduced habitats. Their preferred water temperature is 58 to 62°F.

**Young:** Golden trout spawn once they are 3-4 years old in late spring or early summer when water temperatures range from 50-60°F. Females lay 300-700 eggs that hatch in approximately 20 days.

**Predators:** The golden trout has almost no natural predators in Wyoming since they are often stocked in waters with no aquatic predators. A river otter or a bird like an osprey might snatch them up for a meal occasionally.

**Food:** Like other trout species, golden trout eat aquatic insects, scuds, small crustaceans, and sometimes flying insects that land on the water's surface.

**Did you know?** The Wyoming Game and Fish Department manages 133 alpine lakes for golden trout. The Story Fish Hatchery in Wyoming is the only facility in the United States with a captive population of adult golden trout for egg production. The roughly 250,000 eggs collected from Story golden trout each year are mostly used for fish stocking in Wyoming's high mountain lakes. Extra eggs are shipped to Colorado, Utah, Idaho, Montana, Washington and California.

# WILDLIFE PROFILES



You don't see a swift fox often in the daylight; they are nocturnal which means they go out the most at night.

## Swift Fox (*Vulpes velox*)

**Range:** Swift foxes are found in the western grasslands of North America.

**Size:** The swift fox is a small fox that is about the size of a domestic cat, measuring about 12 inches tall and 31 inches long from its nose to the tip of its tail. They weigh about five to seven pounds.

**Habitat:** Swift foxes build their dens in sandy soil on open grasslands or sagebrush and in agricultural fields. They are primarily nocturnal, spending their days in their den and hunting at night.

**Young:** Swift foxes breed once a year in March, give birth to four or five kits in May that are weaned at six to seven weeks old. Kits stay with their parents until the fall.

**Predators:** The coyote is the swift fox's main predator. Other predators are badgers, golden eagles and bobcats.

**Food:** The swift fox is an omnivore, meaning it eats both plants and meat. Its diet includes small mammals like prairie dogs, ground squirrels and mice, carrion (roadkill or other scavenged meat), insects and lizards as well as grasses and fruits.

**Did you know?** The swift fox was once a severely endangered species due to predator control programs in the 1930s, but populations are now stable and healthy. They are even expanding their range across Wyoming! It is closely related to the kit fox and the two can breed where ranges overlap.

# AROUND WYOMING



Trout are sensitive to the heat so fishing in the summer takes a little extra care.

## HOT WEATHER STRESSES FISH — YOU CAN HELP

Fishing is fun in the summer, but when it is hot the heat can affect fish, especially trout. Hot air temperatures can heat up the water in lakes, rivers and reservoirs. Fish “breathe” oxygen in the water using their gills. Warmer water holds less oxygen than cold water, so when water gets warm fish are more stressed because they have to work harder to get oxygen. This can cause some species, especially trout, to die.

**To help fish you catch and release survive during the summer, follow these tips:**

- Fish early in the morning while water temperature is cooler.
- Carry a pocket thermometer and monitor the water temperature.
- If the water temperature is at or above 65 degrees, consider keeping what you catch within the regulations. If the water temperature is 70 degrees or higher, do not attempt to catch and release fish.

**You can help fish survive if you can catch and release fish quickly. Here is the best way:**

- Reel in the fish as quickly as possible. It helps the fish keep energy and not get stressed.
- Keep the fish in the water as much as possible.
- Do not squeeze the fish or put your fingers in the gills.
- Remove the hook gently. Barbless hooks help you take the hook out.
- If a fish is exhausted and cannot hold itself upright in the water, and if regulations allow, consider having it for supper because the fish has a poor chance of surviving.

If you enjoy fishing, consider tackling the Youth Fishing Challenge - details can be found here: <https://wgfd.wyo.gov/Fishing-and-Boating/Youth-Fish-Challenge>



# OUTDOOR CLASSROOM

## Summertime Sound Safari

Head outdoors and see how many of these sounds you can hear on your very own nature sound safari:





Wind in the trees





Prairie dogs or ground squirrels chirping





Mosquitoes or flies buzzing





Rocks, sticks or grass crunching under your feet





Snake slithering through the grass





Owl hooting



Water flowing in a creek or river





Beaver slapping its tail on the water





Frogs croaking





Waves lapping on the shore





Grasshoppers clicking





Duck quacking



Birds calling



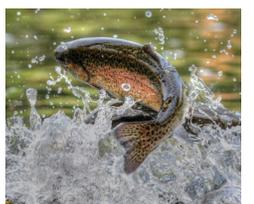


Thunder





Fish jumping





Rain falling





Coyotes howling





Fishing lure plunking into the water



Squirrels chattering or barking





Cracking campfire





Fill in any other interesting sounds you hear:

---

---

---

---

---

# TEST YOUR KNOWLEDGE

**FILL IN THE BLANKS TO ANSWER THESE TRICKY QUESTIONS — LOOK AROUND THE REST OF THE ISSUE IF YOU NEED A HINT!**

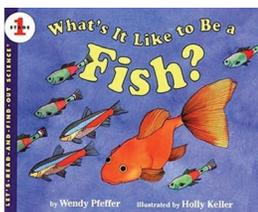
1. Burrowing owls use old burrows dug by \_\_\_\_\_ or \_\_\_\_\_.
2. The number of fish stocked in a high mountain lake depends on the size of the lake, but it is usually around \_\_\_\_\_ fish.
3. Golden trout are found in Wyoming, but they are native to the State of \_\_\_\_\_.
4. Swift foxes are very small, about the same size as a \_\_\_\_\_.
5. Because warm water holds \_\_\_\_\_ oxygen than cold water, summertime can be stressful for some fish.

ANSWERS: 1. badgers / prairie dogs; 2. 1,000; 3. California; 4. House cat; 5. less

## LEARNING LINKS

If you enjoyed this issue of Wild Times and would like to see more, visit <https://wgfd.wyo.gov/Education/Conservation-Education/Wild-Times>

### Books to check out



**What's It Like to Be a Fish?**  
By Wendy Pfeffer

You can't breathe underwater, but a fish can. You can't eat underwater, but a fish does it every day. This picture book explains how a fish's body is perfectly designed for life in water, inviting young readers to imagine what it's like to have gills, fins and scales. Simple, fun diagrams help explain concepts like how fish use their gills to breathe underwater.



**Freshwater Fishing for Kids  
(Into the Great Outdoors)**  
By Melanie Ann Howard

You drop your line in the lake and wait quietly. Soon you feel a tug. Do you have what it takes to reel in your big catch? Now is your chance to learn what you need to know about freshwater fishing history, gear, techniques, safety and more.



Volume 14, No. 3  
Summer 2020

Editor/writer: Ashley Andersen Leonard

Graphic Design: Patrick Owen

Additional editors and contributors: Sara DiRienzo,  
Grant Frost, Justin Joiner, Mark Smith

The Wyoming Game and Fish Department receives financial assistance in Sport Fish and Wildlife Restoration. Under title VI of the 1964 Civil Rights Act, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, the U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, age, sex, or disability. If you believe that you have been discriminated against in any program, activity, or facility as described above, or if you desire further information please write to: Department of Interior, U.S. Fish and Wildlife Service, Division of Human Resources, 4401 N. Fairfax Drive, Mail stop: 2000, Arlington, Virginia 22203.