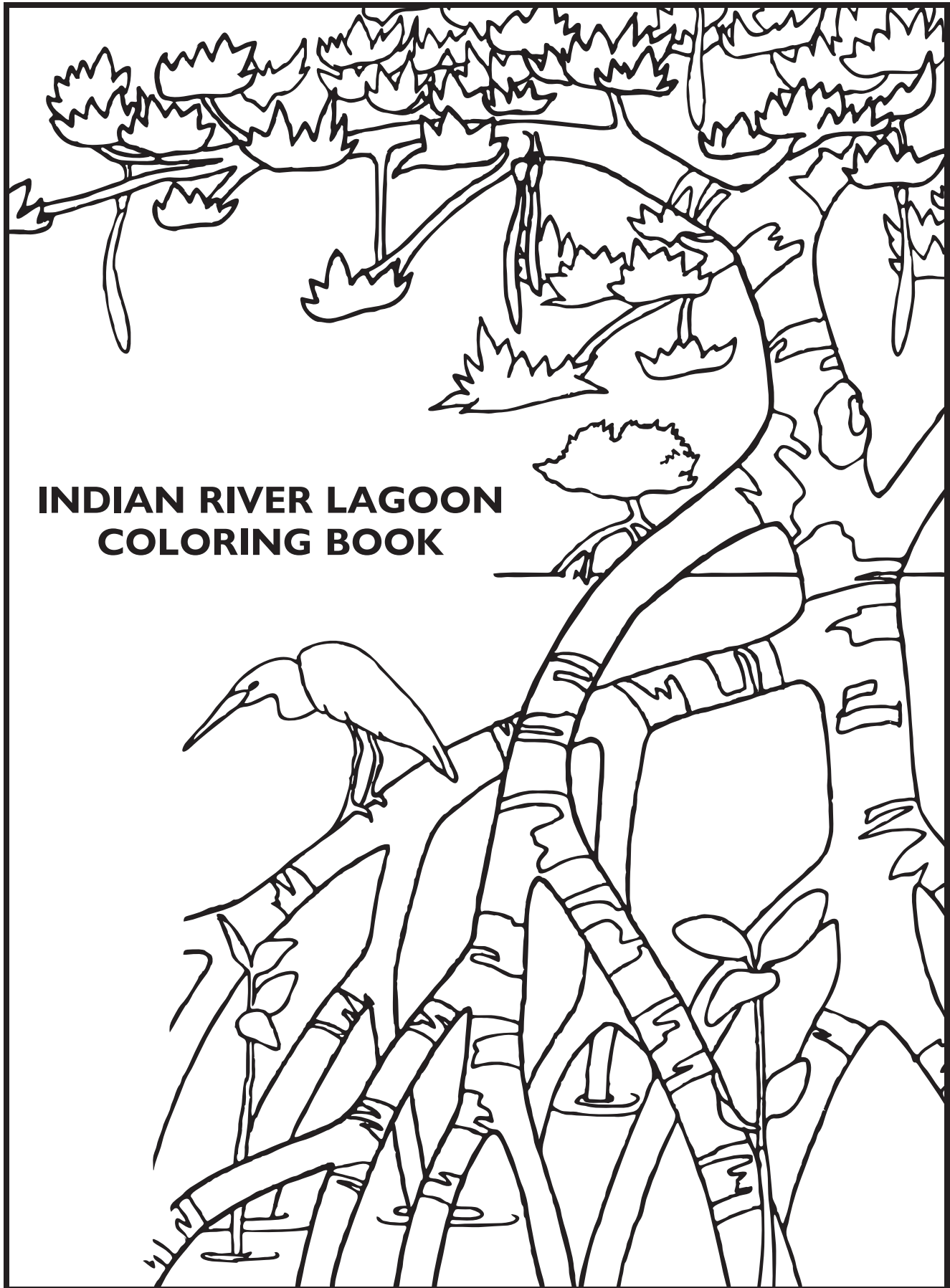


A vibrant, colorful illustration of an Indian River Lagoon ecosystem. In the foreground, a large manatee is partially submerged in the water, looking towards the viewer. To its right, a large green crab is on the sandy bottom. In the center, a large tree with thick, brown, gnarled branches stands in the water. A black and white bird is perched on one of the branches. A large, brown, patterned turtle is swimming near the tree. Several small, colorful fish are swimming around the tree. In the background, a large, bright yellow sun is setting over the water. A line of mangroves is visible on the horizon. The sky is a mix of blue and yellow. The overall scene is a lively and detailed representation of a coastal wetland environment.

2023-09





**This publication was produced through the  
cooperation of the following agencies:**



St. Johns River Water Management District



South Florida Water Management District



Indian River Lagoon Program



Florida Department of Environmental Protection,  
Bureau of Submerged Lands and Preserves



U.S. Environmental Protection Agency

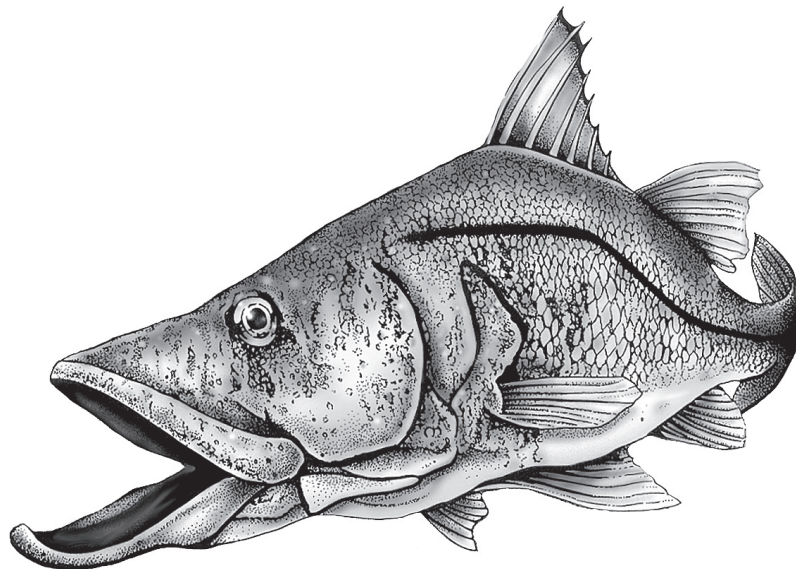
Dear teachers and parents:

To protect the distinctive features of natural waters for future generations to enjoy, the Florida Legislature created aquatic preserves. Aquatic preserves are exceptional submersed lands and waters that are to be maintained in their natural or existing conditions. Management objectives for the preserves are to maintain and improve water quality to protect seagrasses, mangroves, aquatic plants, and birds and fish.

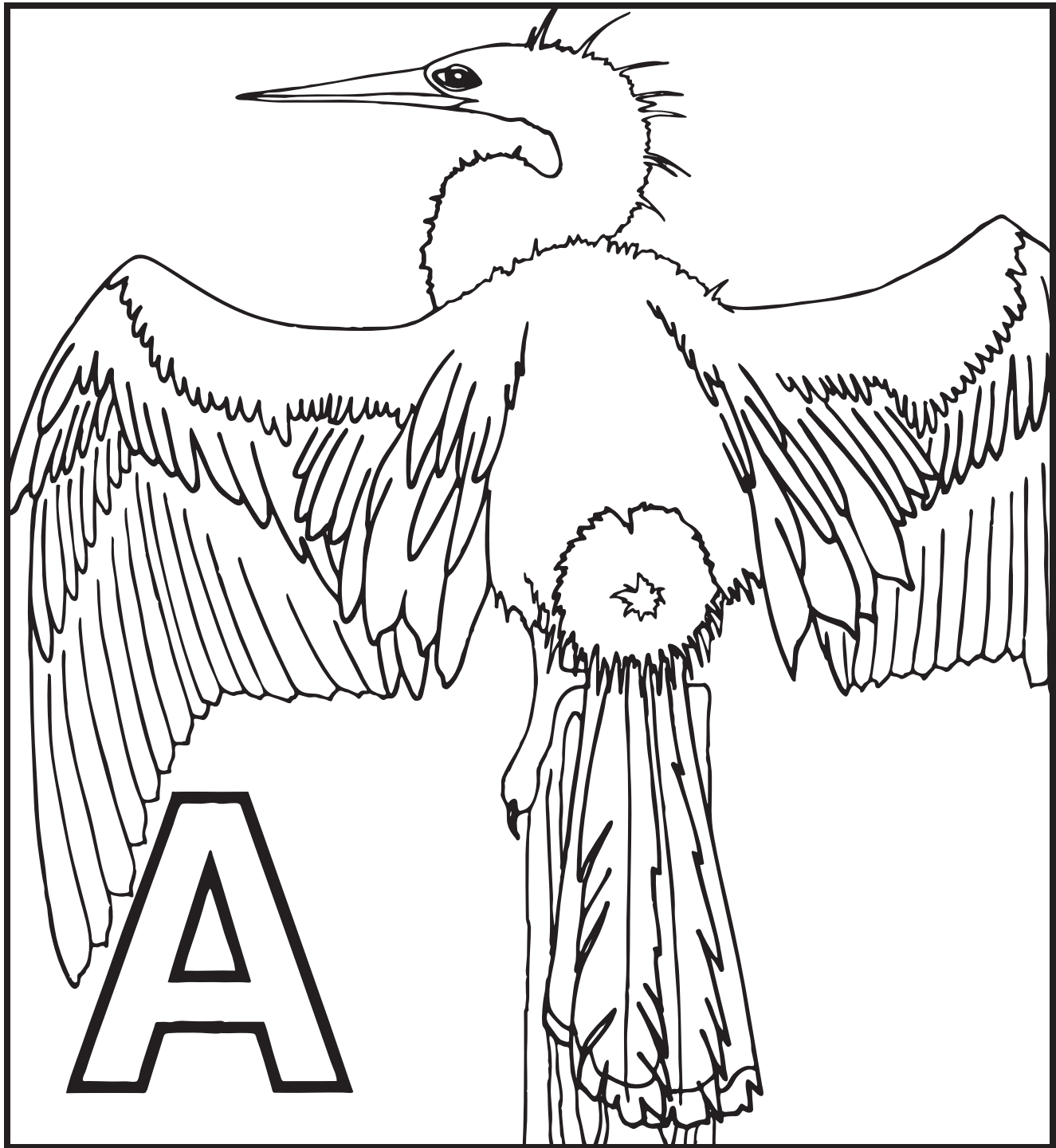
Unfortunately, the distinctive waters that have drawn people to Florida have been endangered by people's actions over many decades. Through careful preservation of our natural resources, plants and animals can be protected and the public assured of the continued enjoyment of water-related activities such as fishing, boating and swimming.

This coloring book introduces children to the many native plants and animals living in Florida's ecosystems. We encourage you to explore this book with your child and enhance your awareness of Florida's important but fragile natural resources.

Sincerely,  
St. Johns River Water Management District

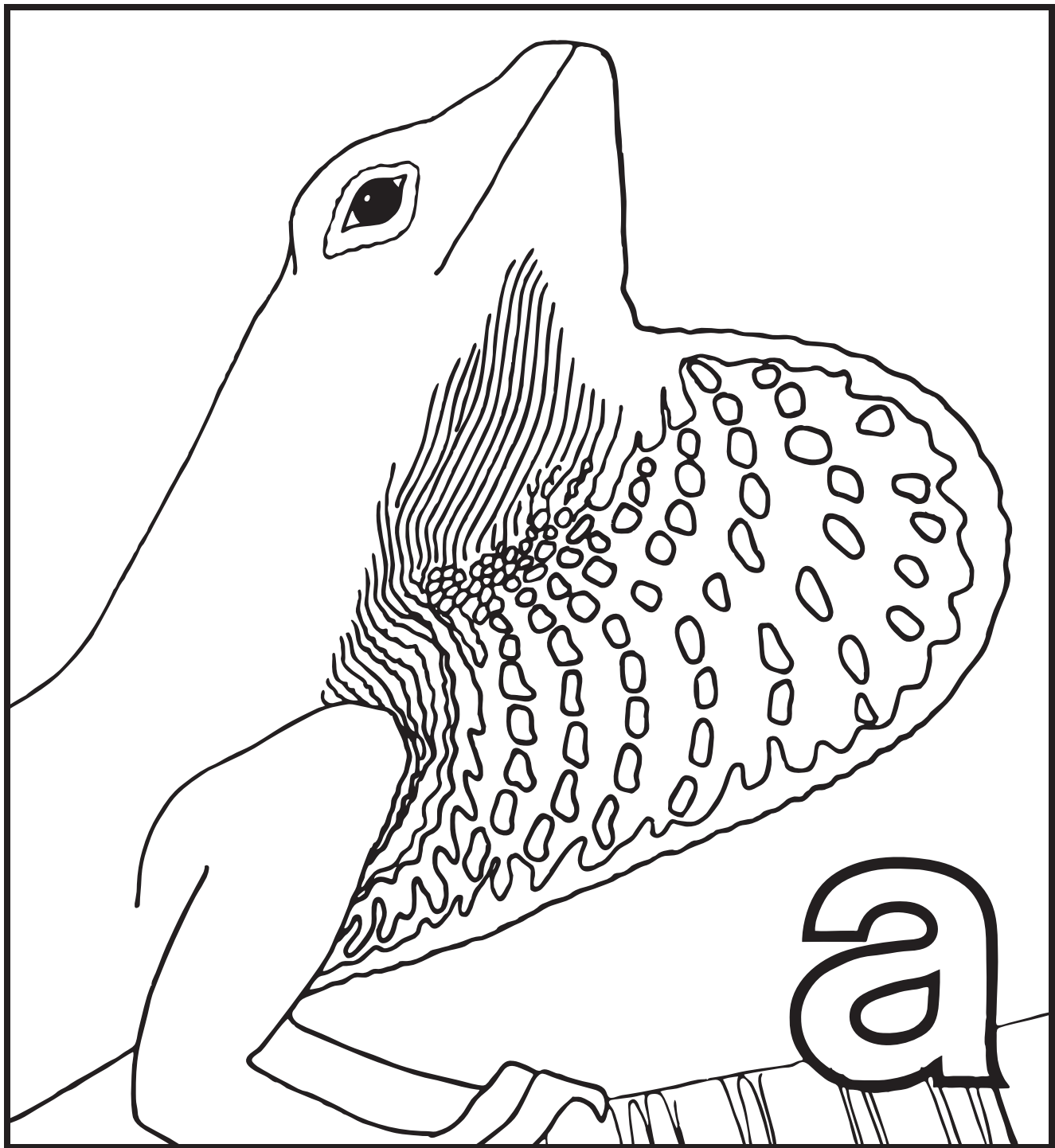






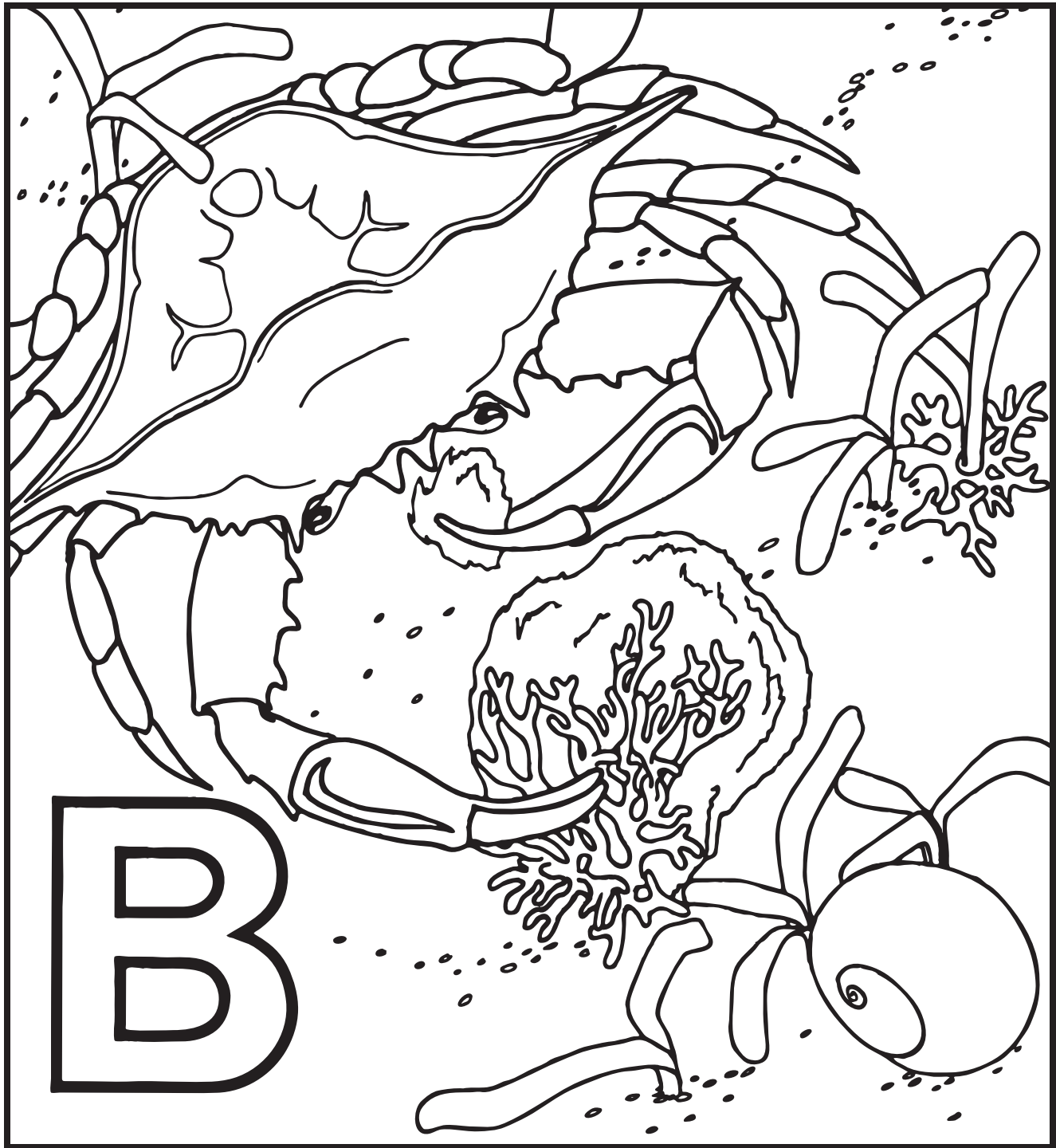
**Anhingas** are long, slim waterbirds that dive into the water to escape danger or hunt. These birds swim underwater and spear fish with their sharp-pointed bills. Unlike other waterbirds, their feathers are not waterproof. Anhingas must sit with their wings spread open to dry.





**Anoles** are small lizards that change color to match their surroundings. Anoles defend their areas from other lizards. Male anoles bob their heads and extend a bright red flap of skin under their necks as a warning to all intruding males. With the use of special toe pads, anoles climb trees in search of insects and spiders.





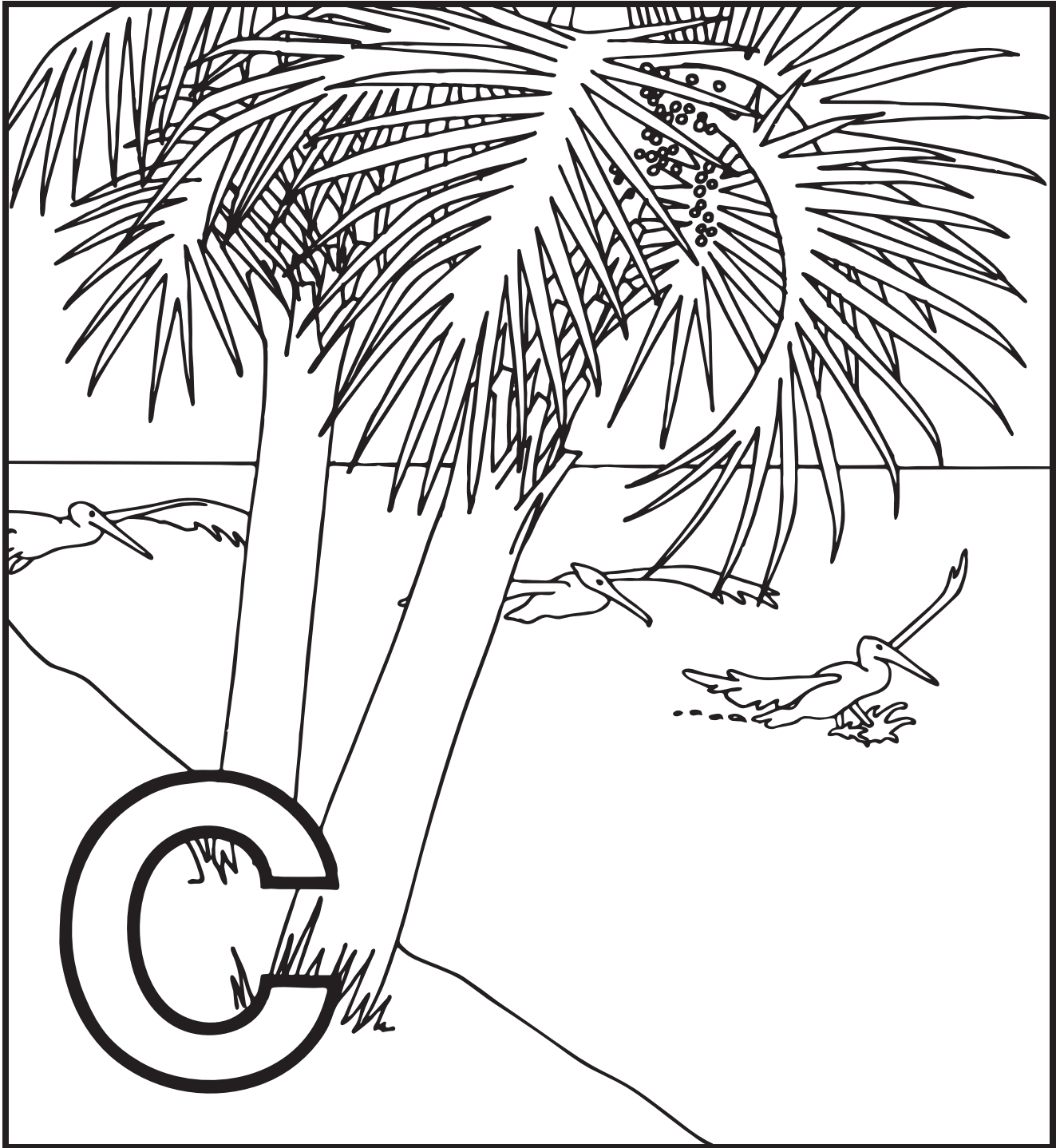
**Blue crabs** live near muddy shores of bays and estuaries. They swim in fresh or salt water. Their hind legs are paddle-shaped, making them rapid swimmers. Blue crabs hide in mud to escape predators or to surprise and capture unwary fish.





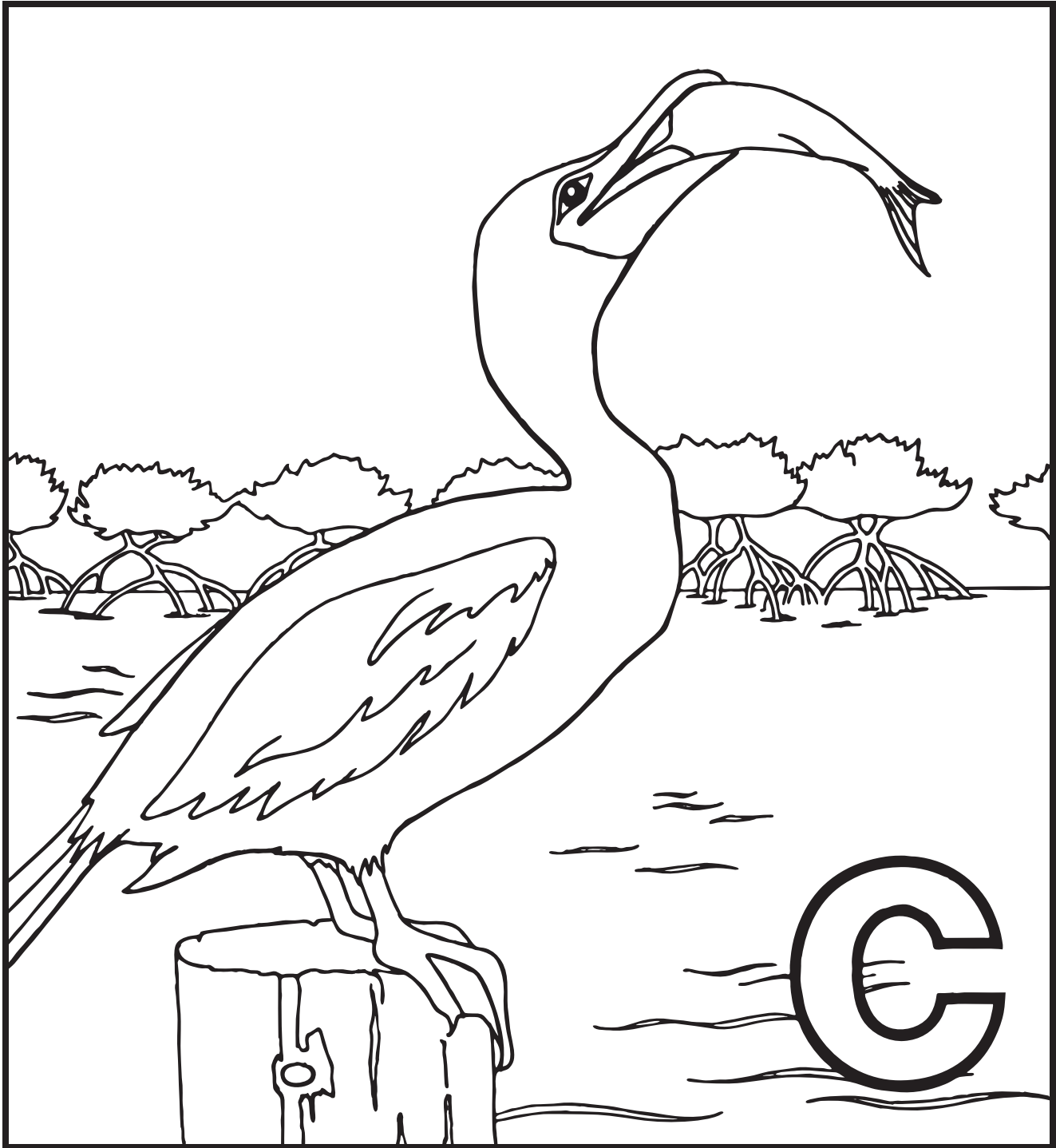
**Bobcats** are short-tailed cats that live in woodland and wetland areas. Although small (25 pounds or less), bobcats are powerful carnivores. As agile in trees as on the ground, these nighttime hunters capture all sizes of prey, from birds and mice to deer.





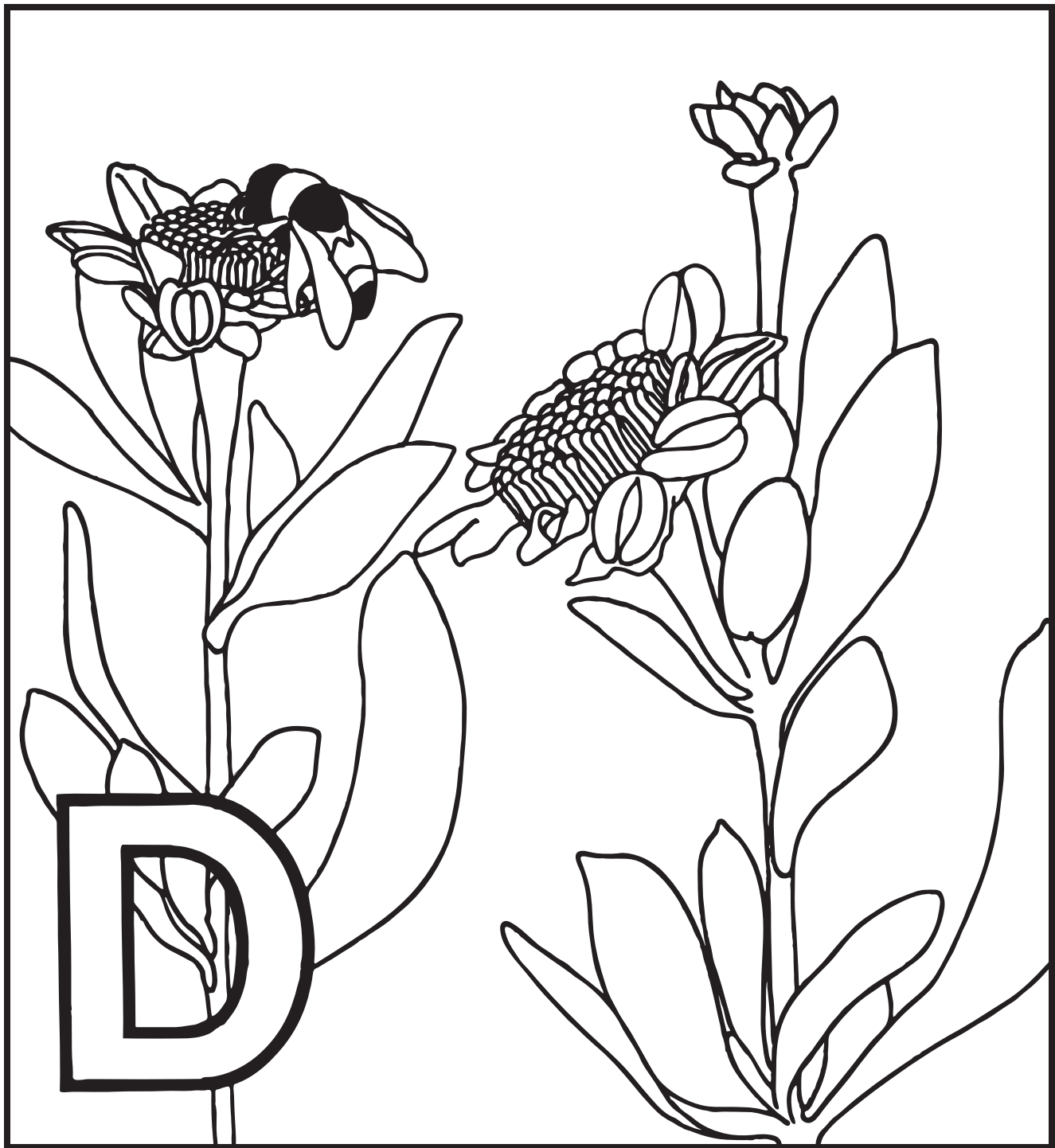
**Cabbage palms** are the state's most common native palm and Florida's state tree. Cabbage palms produce hundreds of small, round, black berries every fall. These berries are a major food source for many animals, including raccoons and robins.



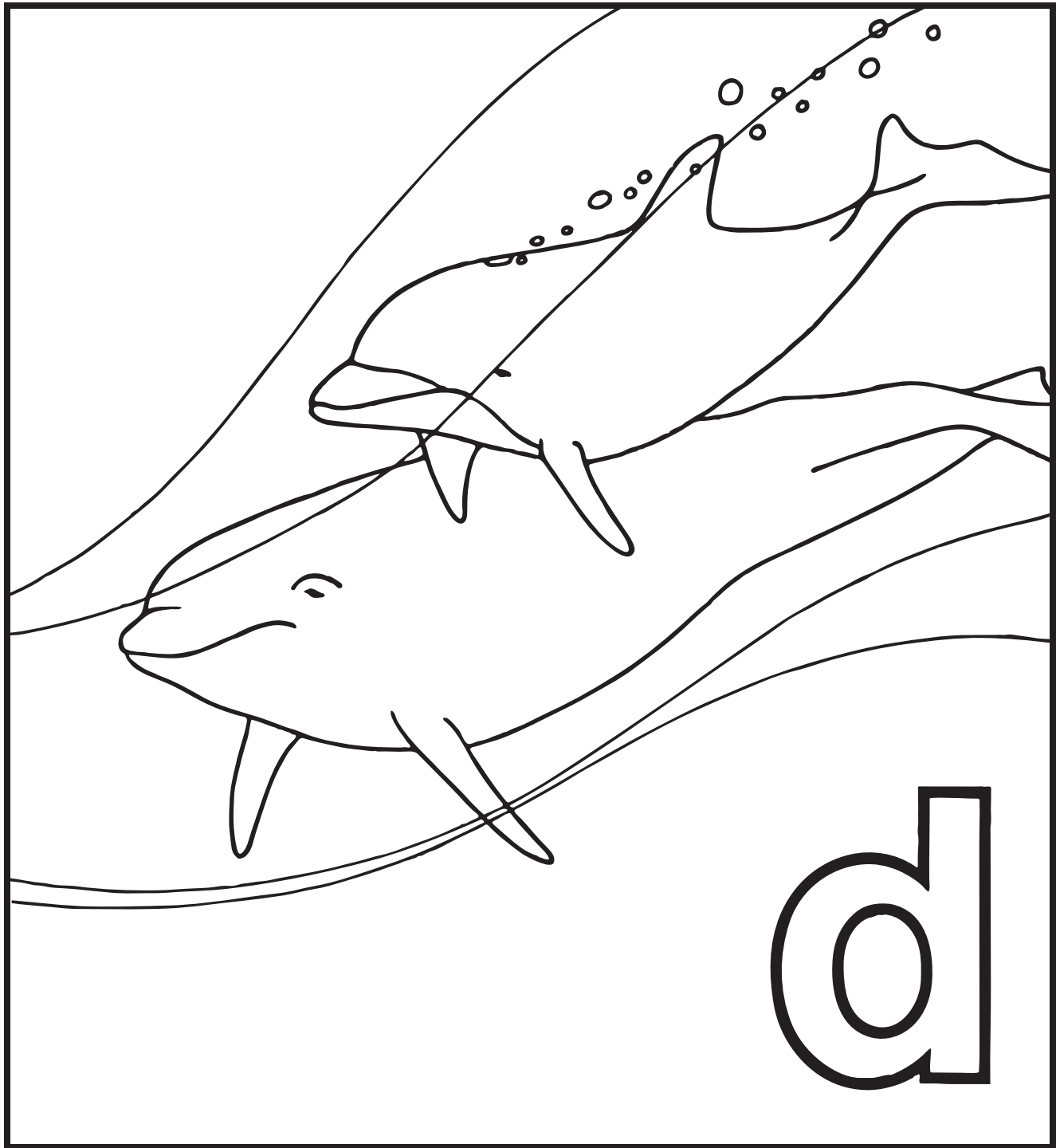


**Cormorants** are dark brown birds with bright orange throats. Cormorants are social animals, preferring to nest together high in trees. The young are fed digested fish from their parents' hooked bills. Just as the anhingas do, cormorants roost after fishing and spread their wings to dry in the sun.



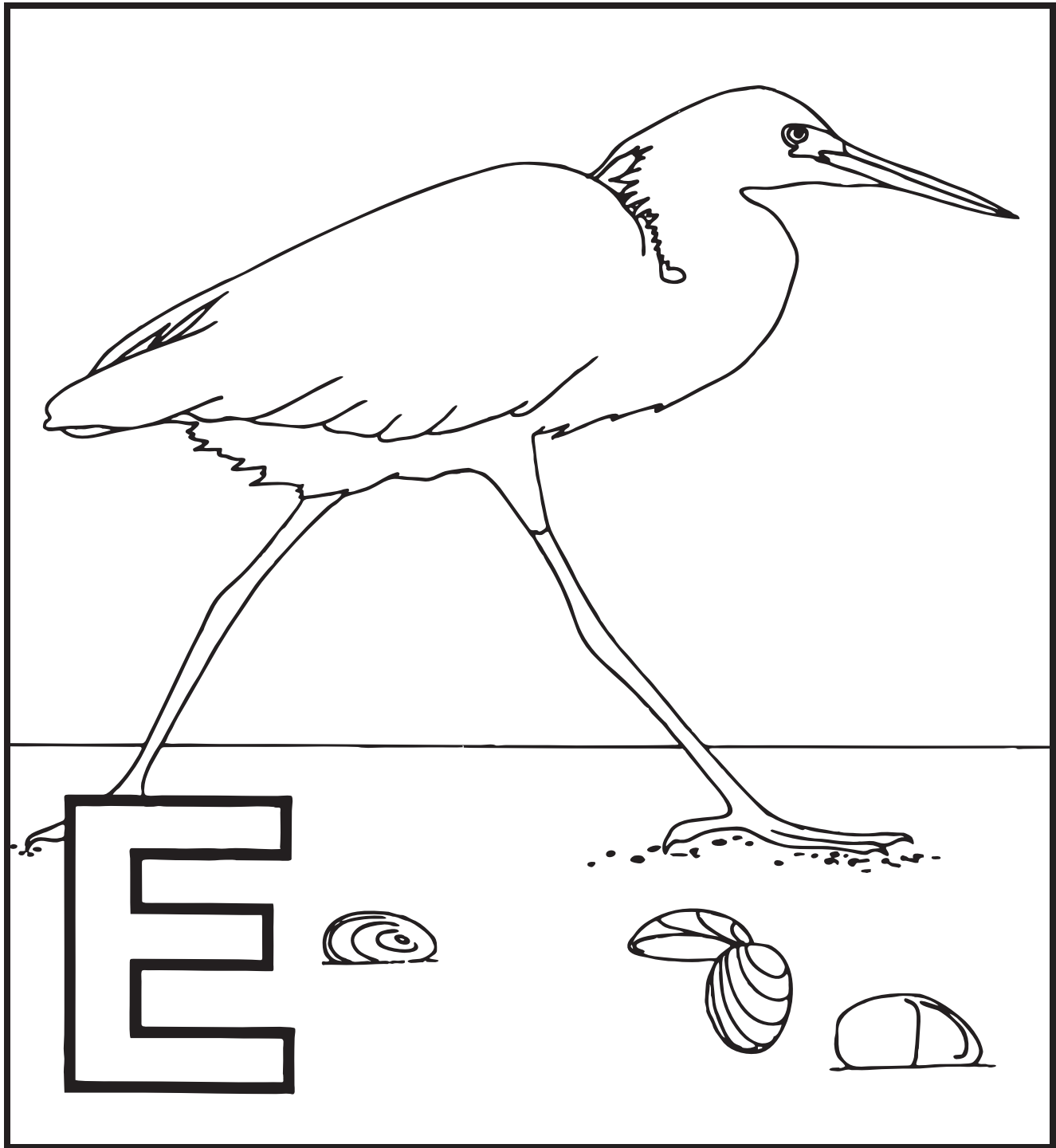


**Daisies** grow on the beach! Sea daisy is a common yellow flower that grows in sandy saltmarsh areas. These bushy silver-green plants grow well in hot, salty conditions. Thick, fuzzy leaves prevent the sea daisy from drying out during warm, sunny days.

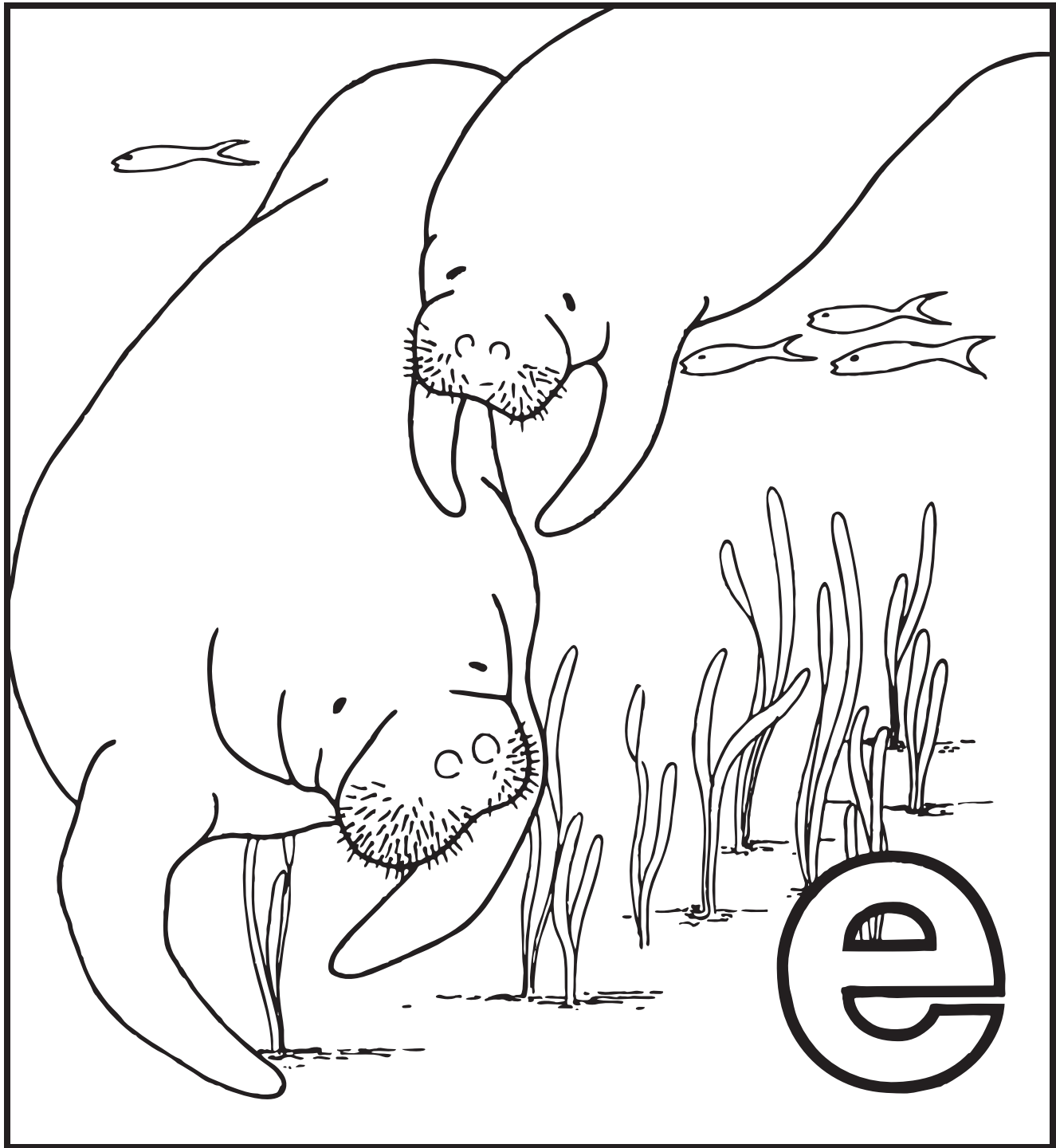


**Dolphins** are air-breathing mammals that live in coastal waters around the world. Dolphins find fish by echolocation—the bouncing of sound waves off of their prey. Dolphins have a unique whistle that helps them to identify each member in their pod (family).



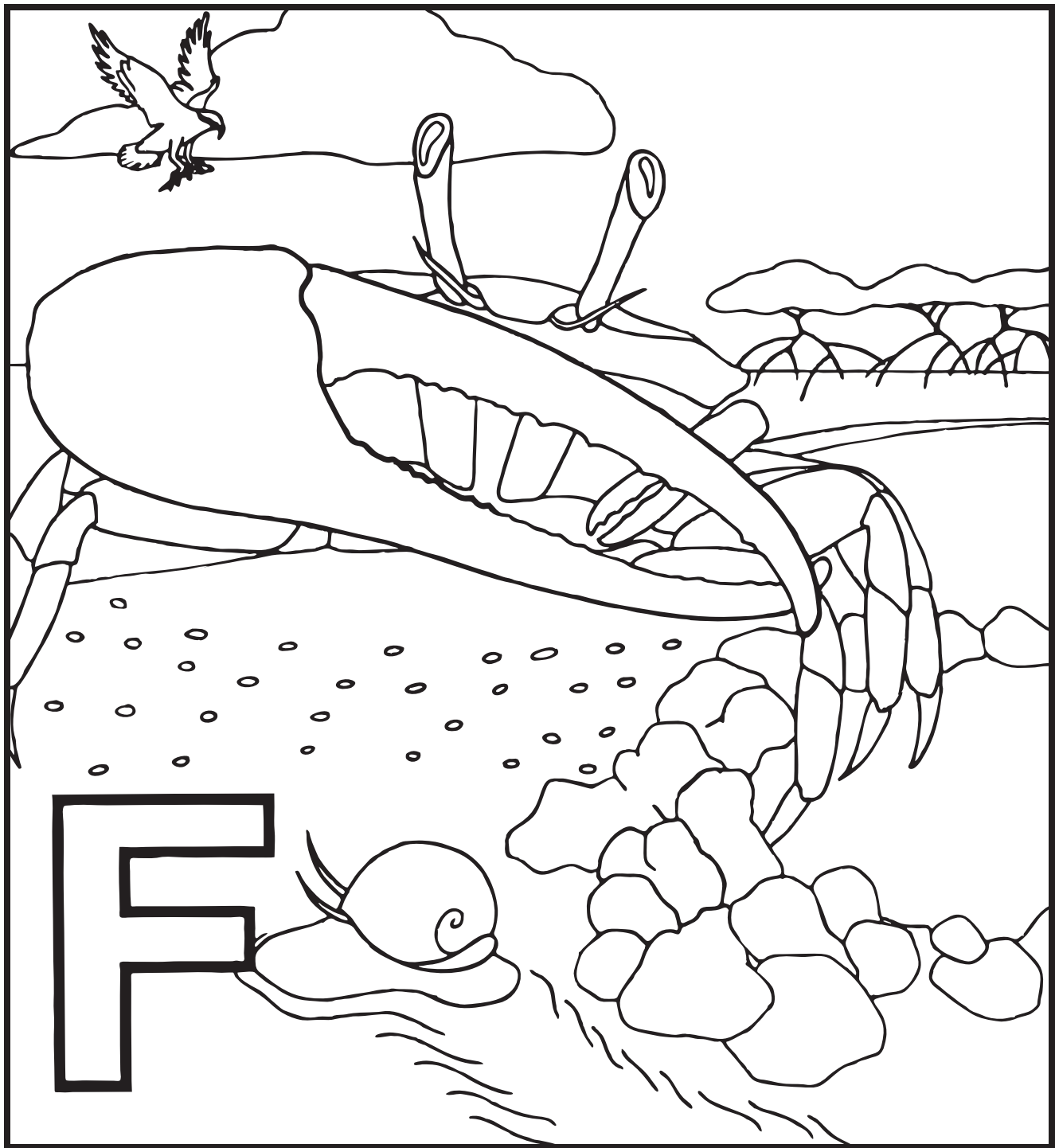


**Egrets** are small white herons. Snowy egrets have black legs and bright yellow feet. Unlike other members of the heron family, egrets shuffle their feet in the water when fishing. Snowys shuffle to stir up shrimp, crabs, insects and fish.

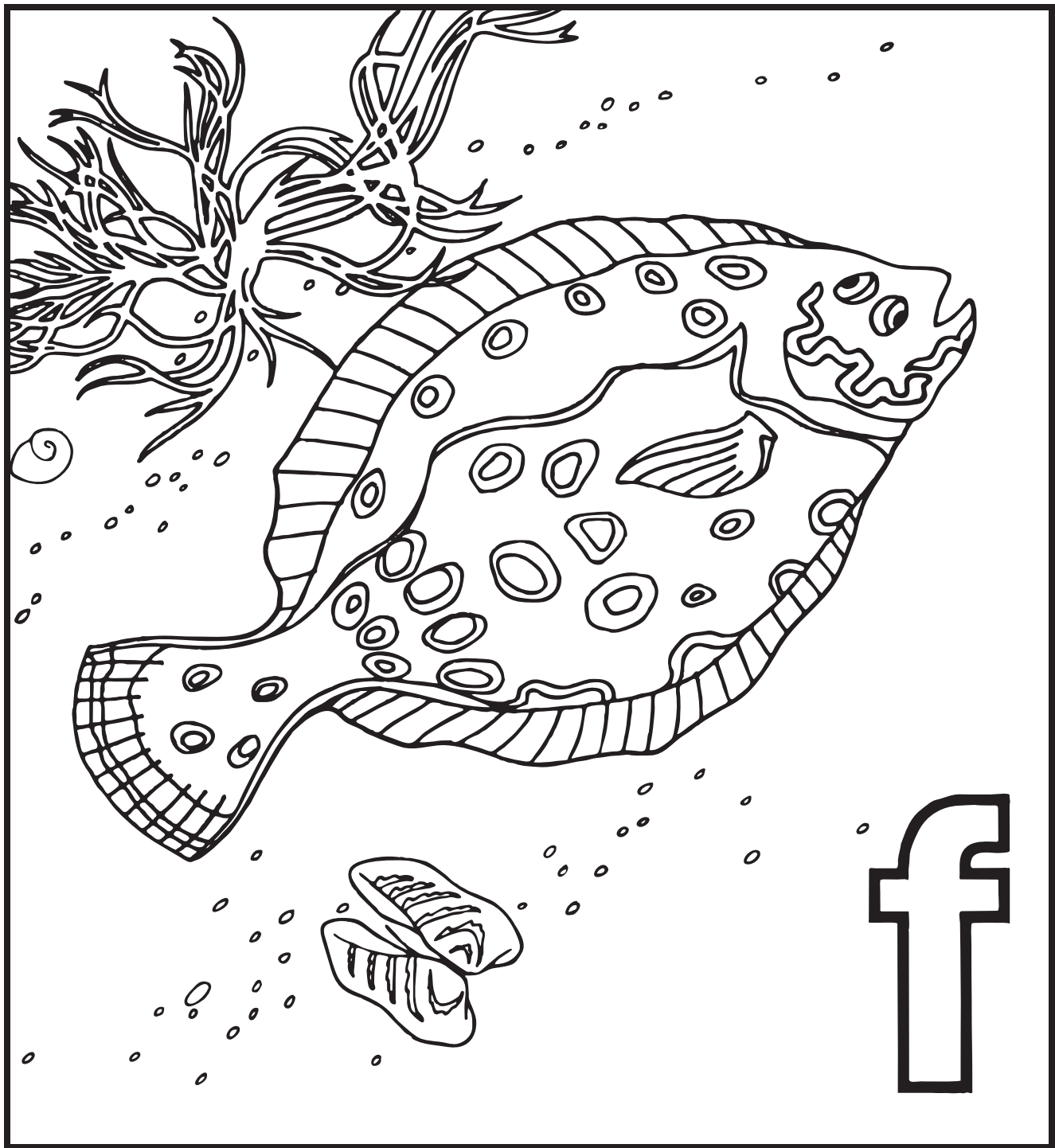


**Endangered** species are plants or animals that exist in very few numbers today. The best way to save endangered species is to protect the areas where they live. For example, manatees eat plants in shallow water. Can you think of a way a boater can protect the manatee?



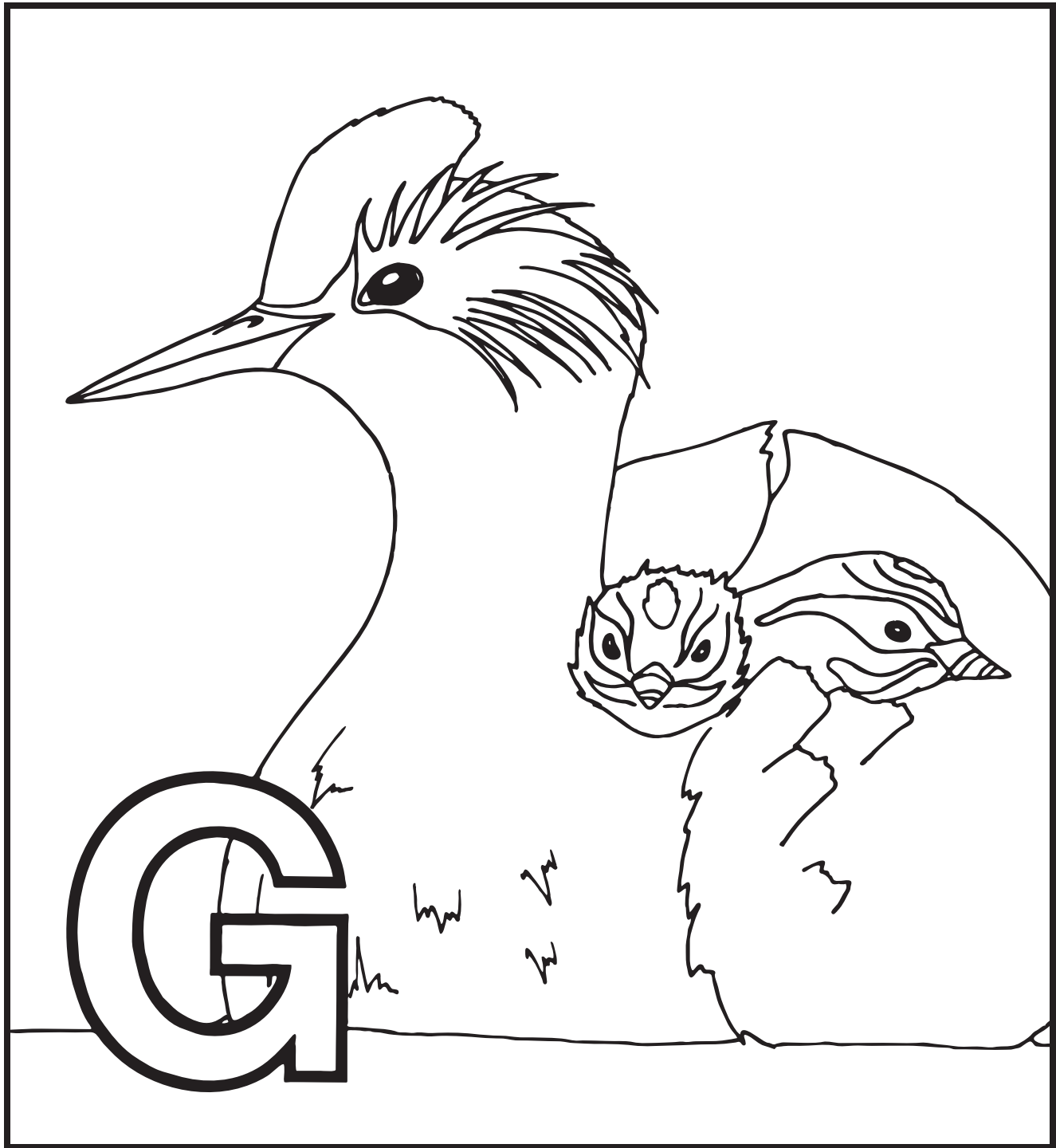


**Fiddler crabs** are small land crabs. Fiddlers dig burrows just below the water line on muddy shores of salt marshes or freshwater streams. Before each high tide, the fiddler scurries into its burrow and plugs the opening with a sand pellet. This plug holds air in and keeps water out.

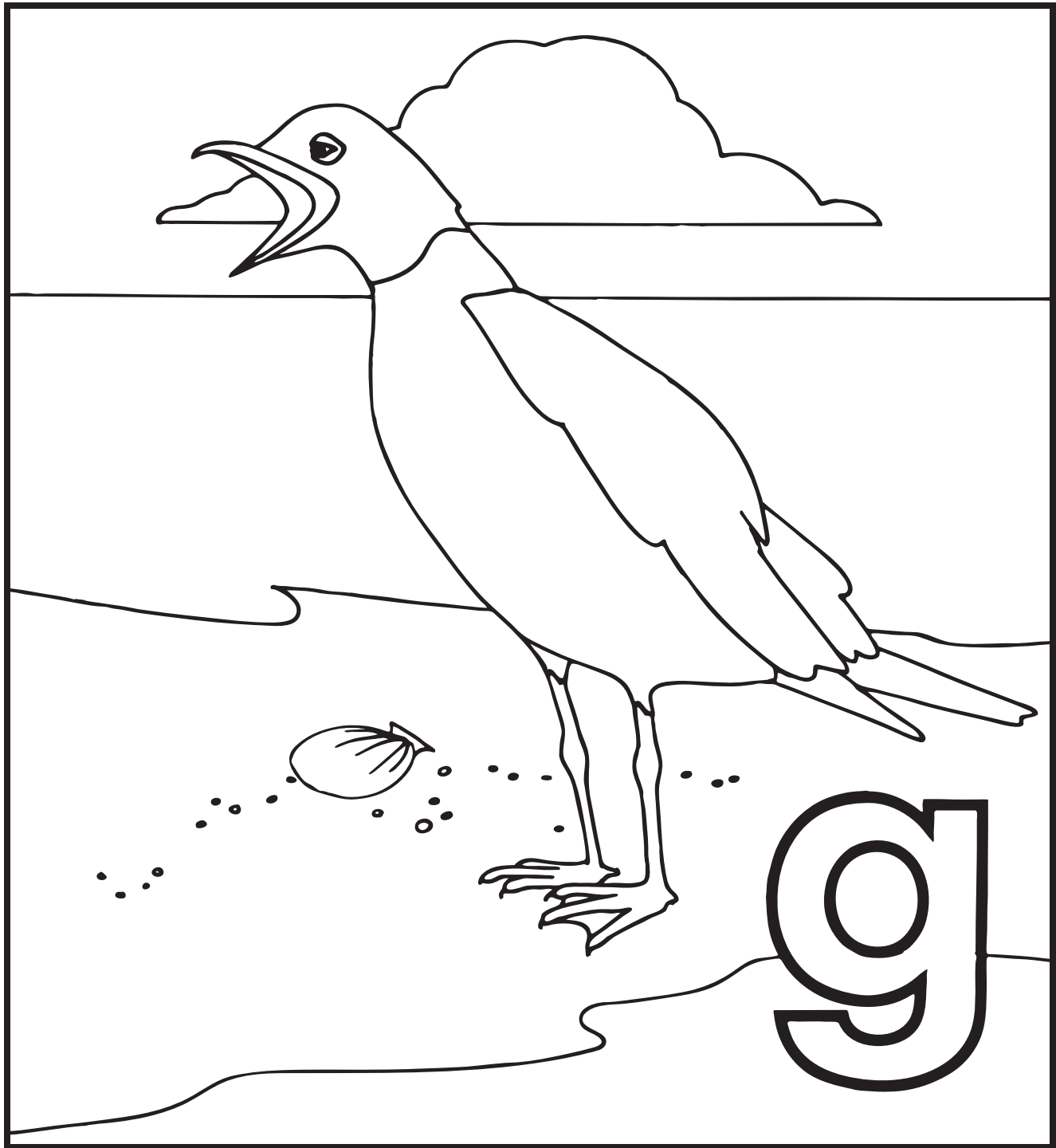


**Flounders** are green and brown flat fish that live on the sea floor. Flounders lie motionless on their sides, using their color to hide from hungry predators. Both eyes are on the upper surface of the body. This allows the fish to see while remaining hidden. Crabs, fish and mollusks are the flounder's favorite foods.



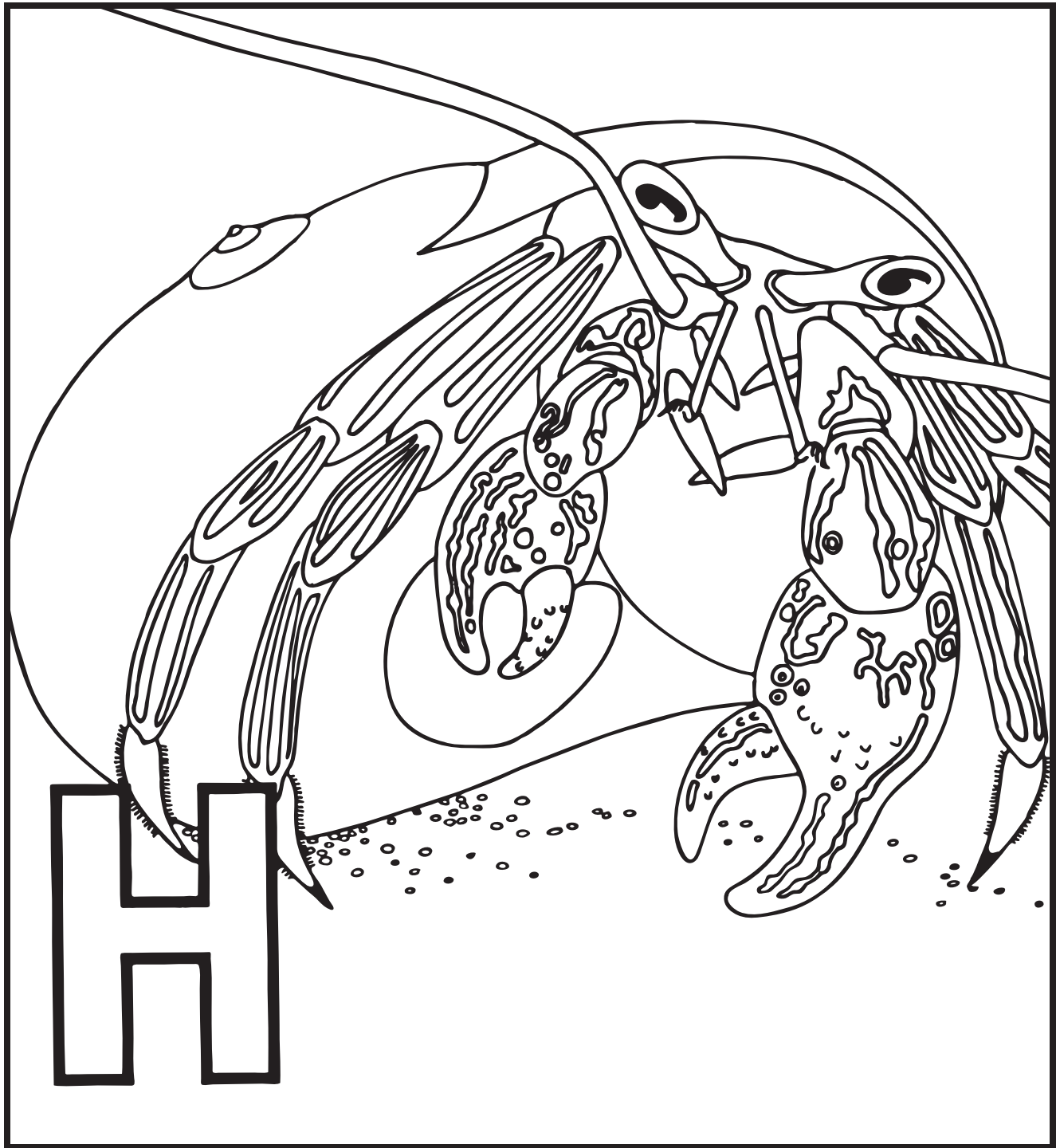


**Grebes** are small, diving waterbirds. Grebes spend most of their time on water, coming to land only to nest. At hatching, the grebe chicks are quickly led to water. Their parents carry them on their backs as protection from predators.

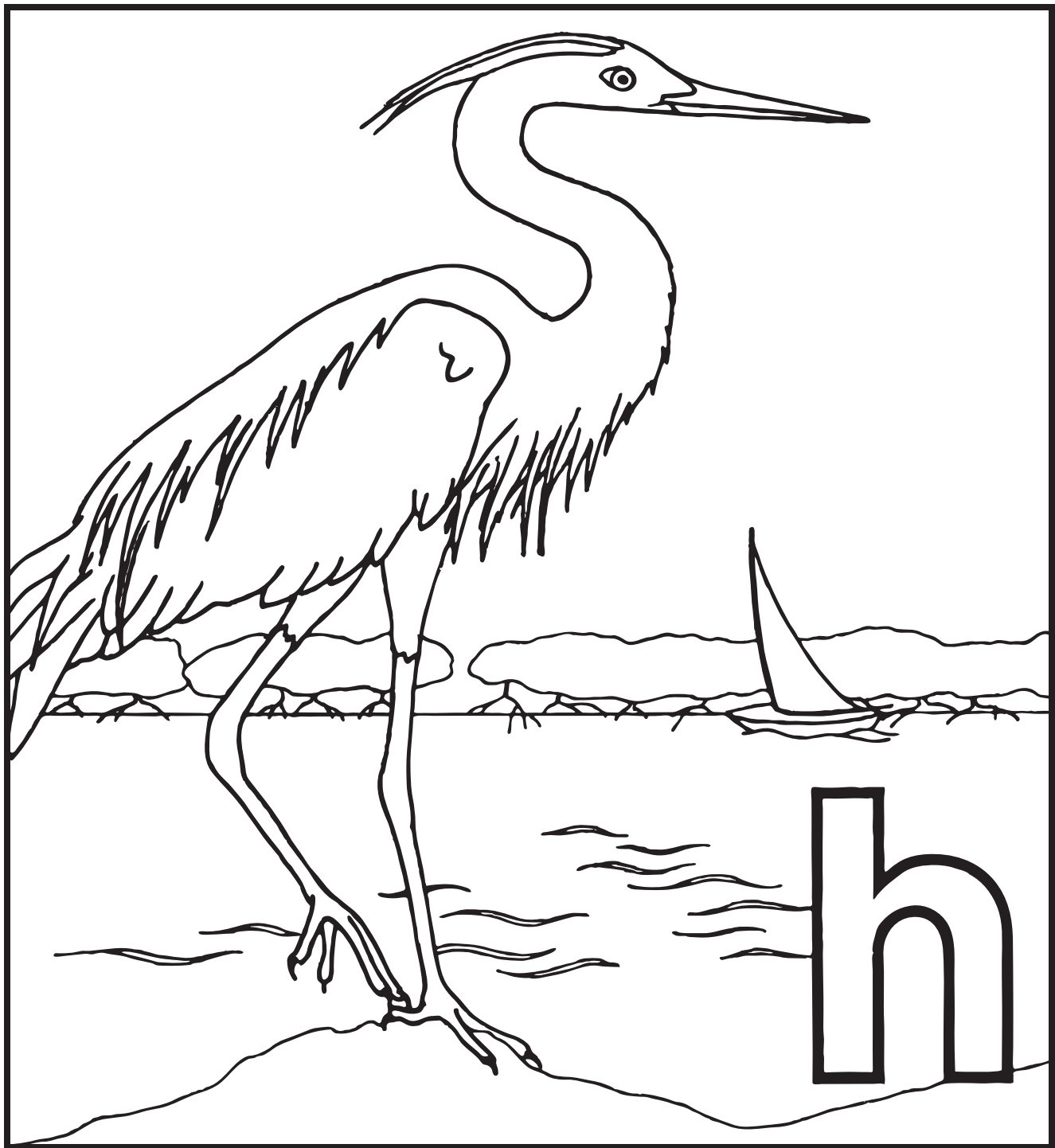


**Gulls** are common waterbirds found around the world. Unlike many waterbirds, seagulls do not dive underwater for food. They fish only on the surface. The laughing gull is less of a scavenger than most gulls. Laughing gulls hunt fish, shrimp and crabs in shallow areas. Laughing gulls' common call is a "ha-ha-ha," which gives these birds their name.





**Hermit crabs** are true omnivores, eating everything from mangrove leaves to bird eggs. Some types of hermit crabs live on land, some live in water. All hermit crabs have gills. To breathe, they must return to water to wet themselves. Hermit crabs do not make their own shells; they crawl into empty ones.

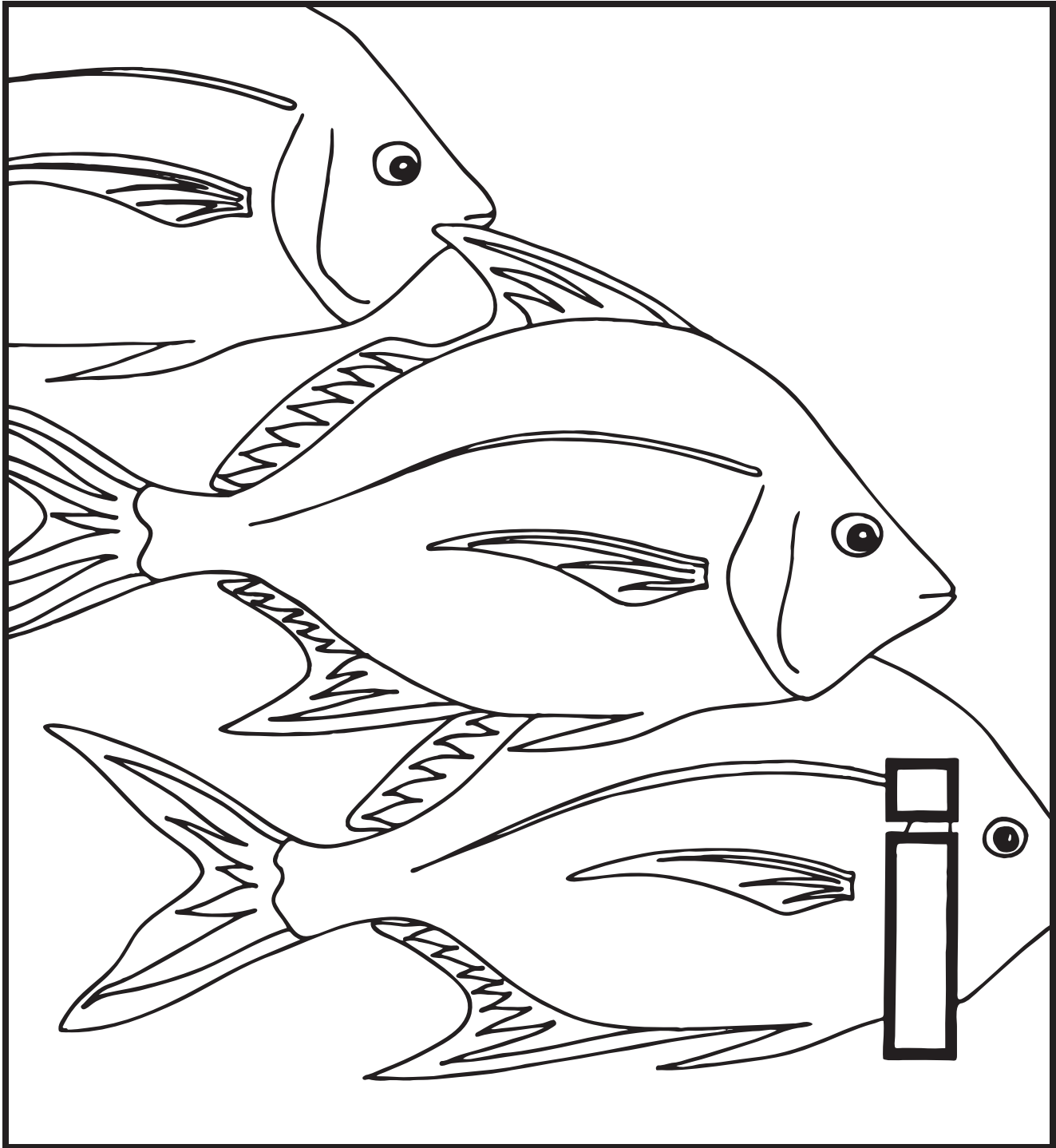


**Heron**s are wading birds. They walk through shallow water to find food. How can you tell if a bird is a heron? Watch it in flight. If its neck is S-shaped, it's a heron! Their favorite meal is fish, but they will eat almost any small animal.

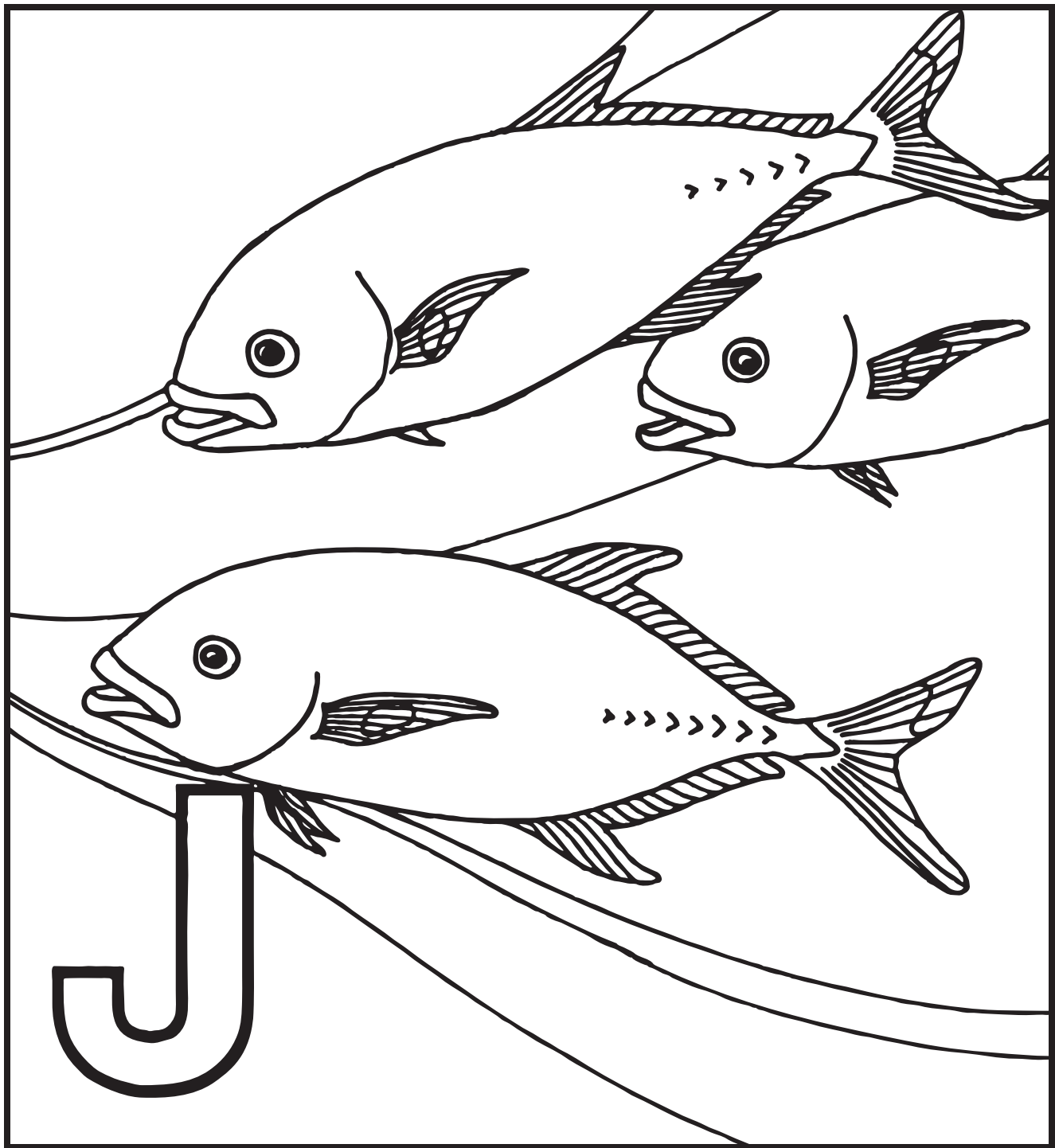


**Ibis** are long-legged wading birds. The glossy ibis wades through shallow water to feed. Its long, thin bill curves toward the ground. This bill is perfect for digging through water-soaked mud for insects, worms and the glossy's favorite food, fiddler crabs.

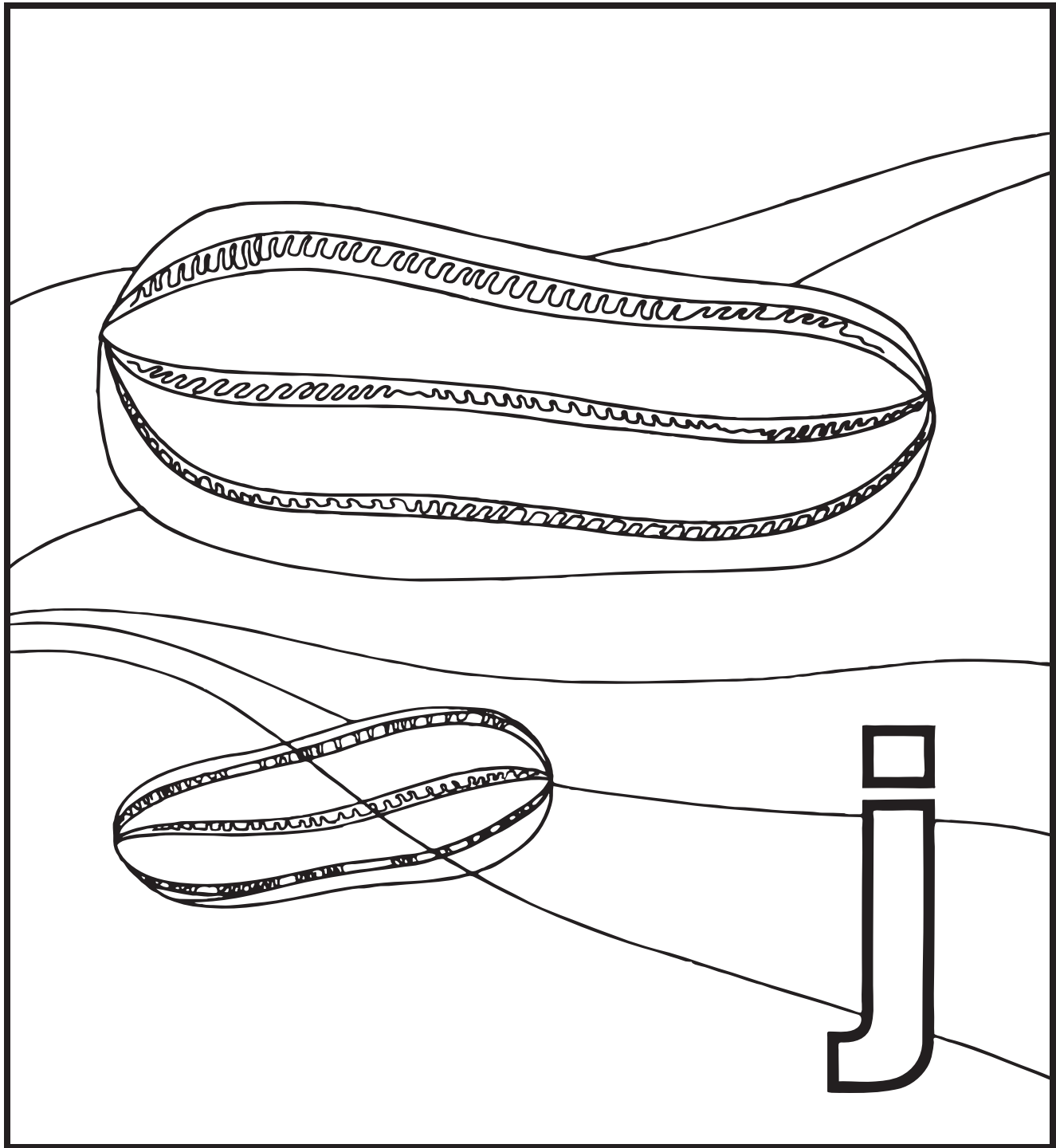




**Irish pompanos** are actually mojarras, silvery tall-bodied fish with deeply forked tails and large jaws. These fish extend their jaws down and out to catch small shrimp, crabs and other crustaceans on the sea floor. Irish pompanos live in shallow sandy or grassy areas close to shore.

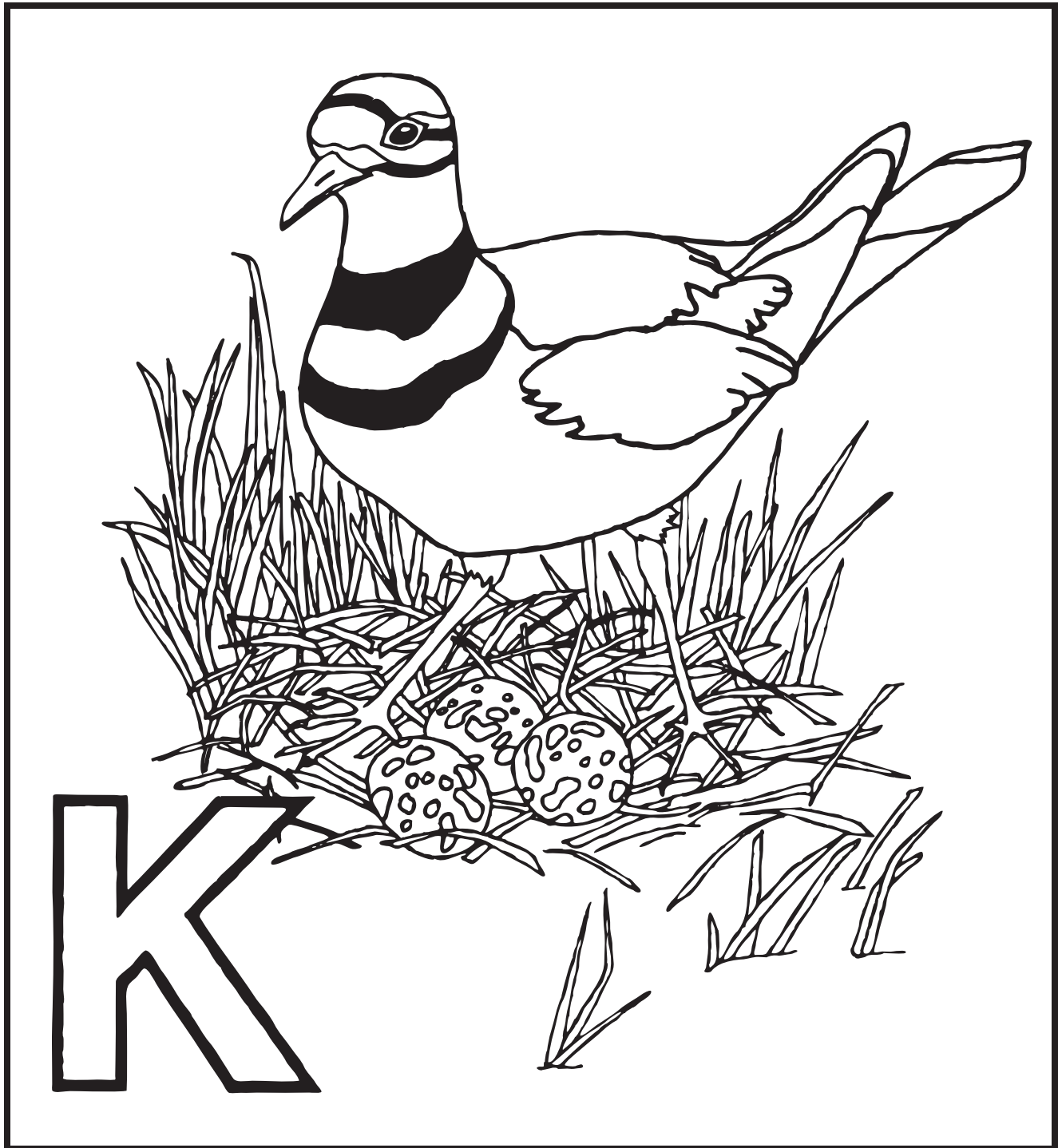


**Jack crevalles** have olive green backs and yellow bellies. They are fast swimmers, traveling in large schools. Jacks live in shallow estuaries when young. They hide under jellyfish and seaweed and in seagrass for protection. Adults are found in both the ocean and estuaries. They are a fun fish to catch. Adults weigh up to 40 pounds!

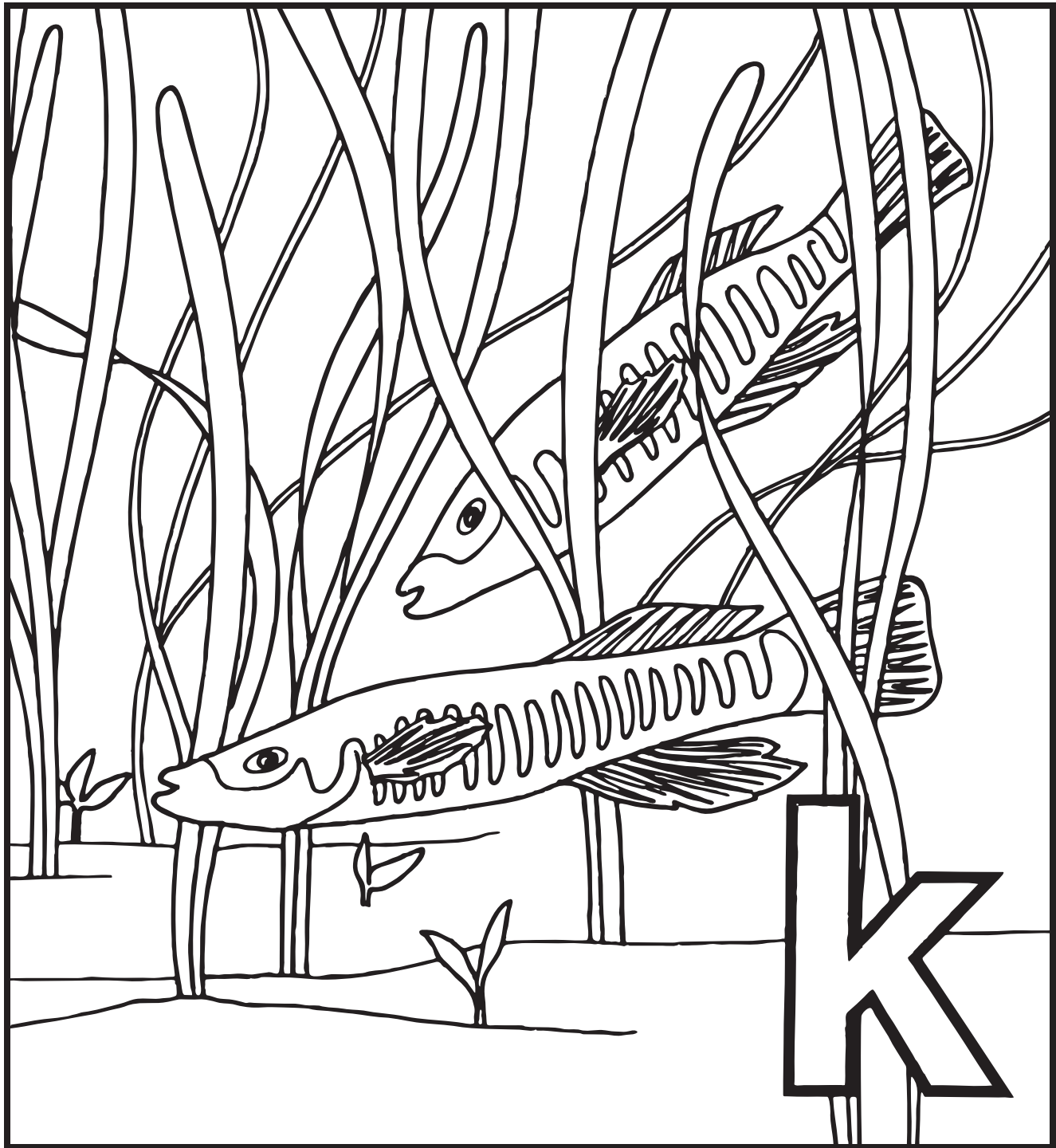


**Jellyfish** are floaters, moving freely with water currents. Comb jellies are animals closely related to jellyfish. Comb jellies move slowly by beating rows of body hairs, which glow in the dark. They drift amidst the seagrass, sucking in passing fish eggs and plankton. Unlike jellyfish, comb jellies do not sting.

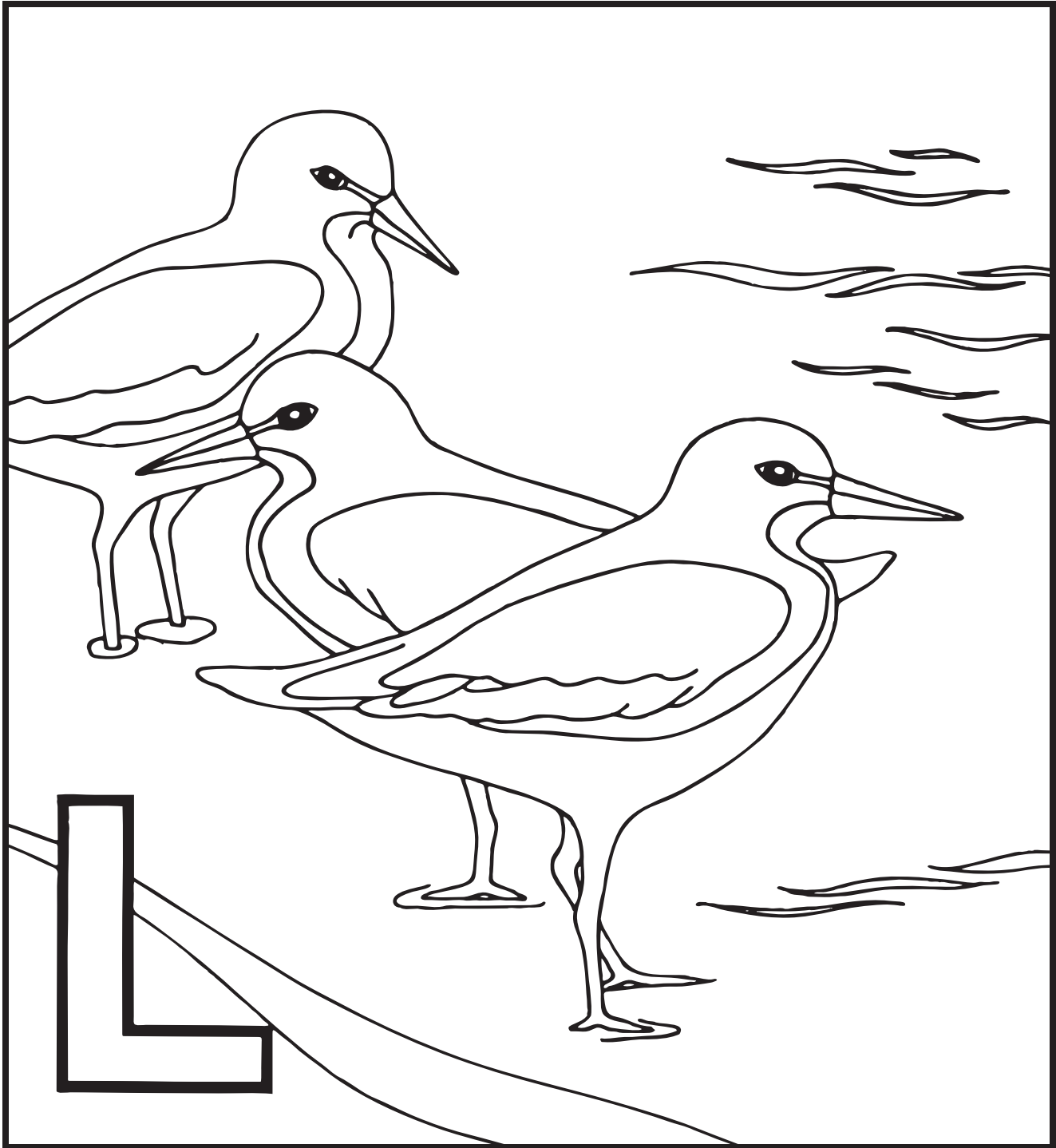




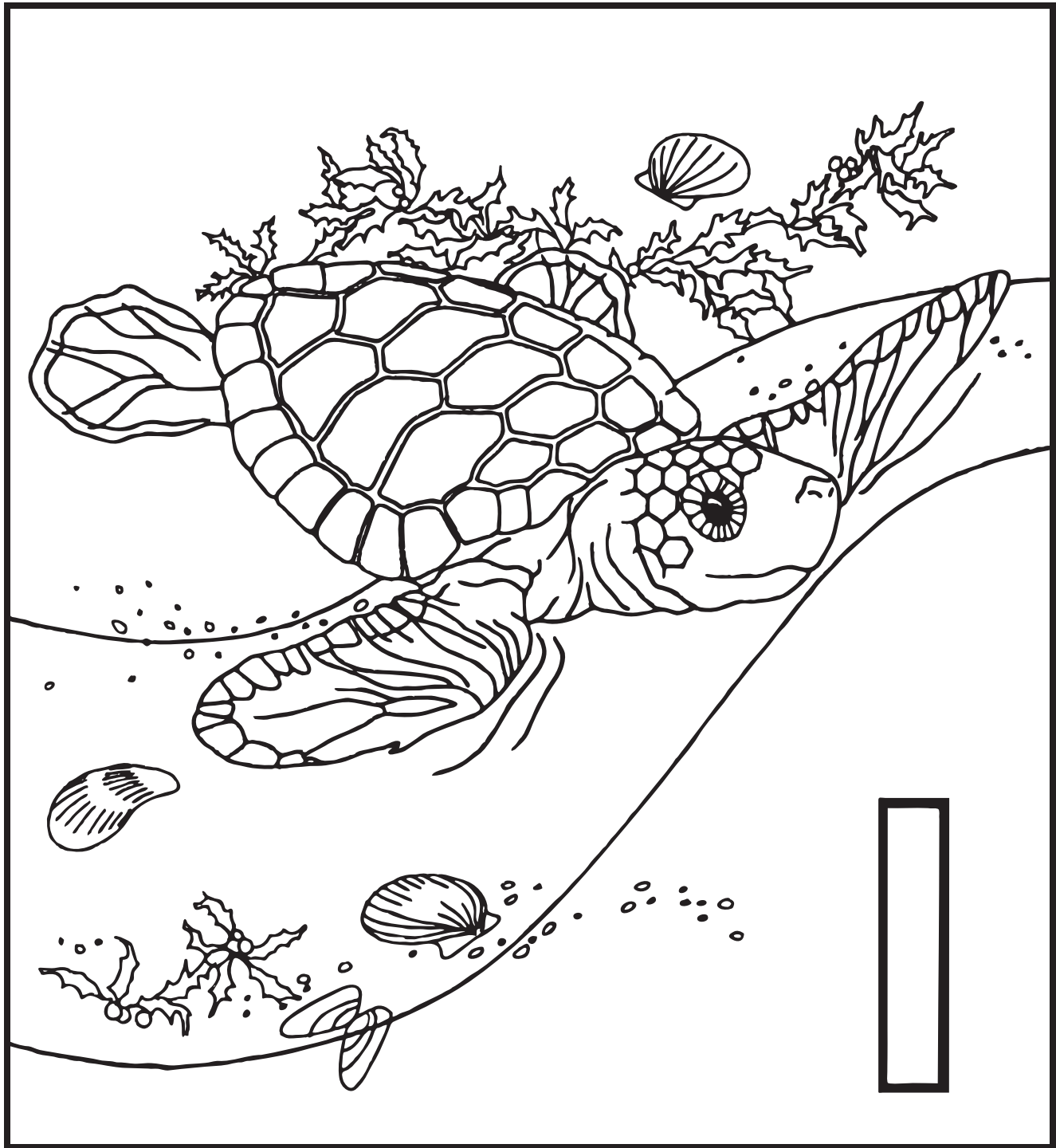
**Killdeers** are ground-nesting shorebirds. The patterns of brown and tan on both the bird and its eggs hide them from predators. Killdeers lure predators from their nest by faking injury. These birds drag their wings on the ground as they limp from the nest site. Once a safe distance from its young, the parent flies off, calling loudly “killdeer, killdeer”!



**Killifish** are a favorite food of larger, sport fishes. Different species of killifish live in both fresh and salt water. Longnose killifish live around mangrove roots and on tidal flats. They are dull silver in color with dark bars along their sides.

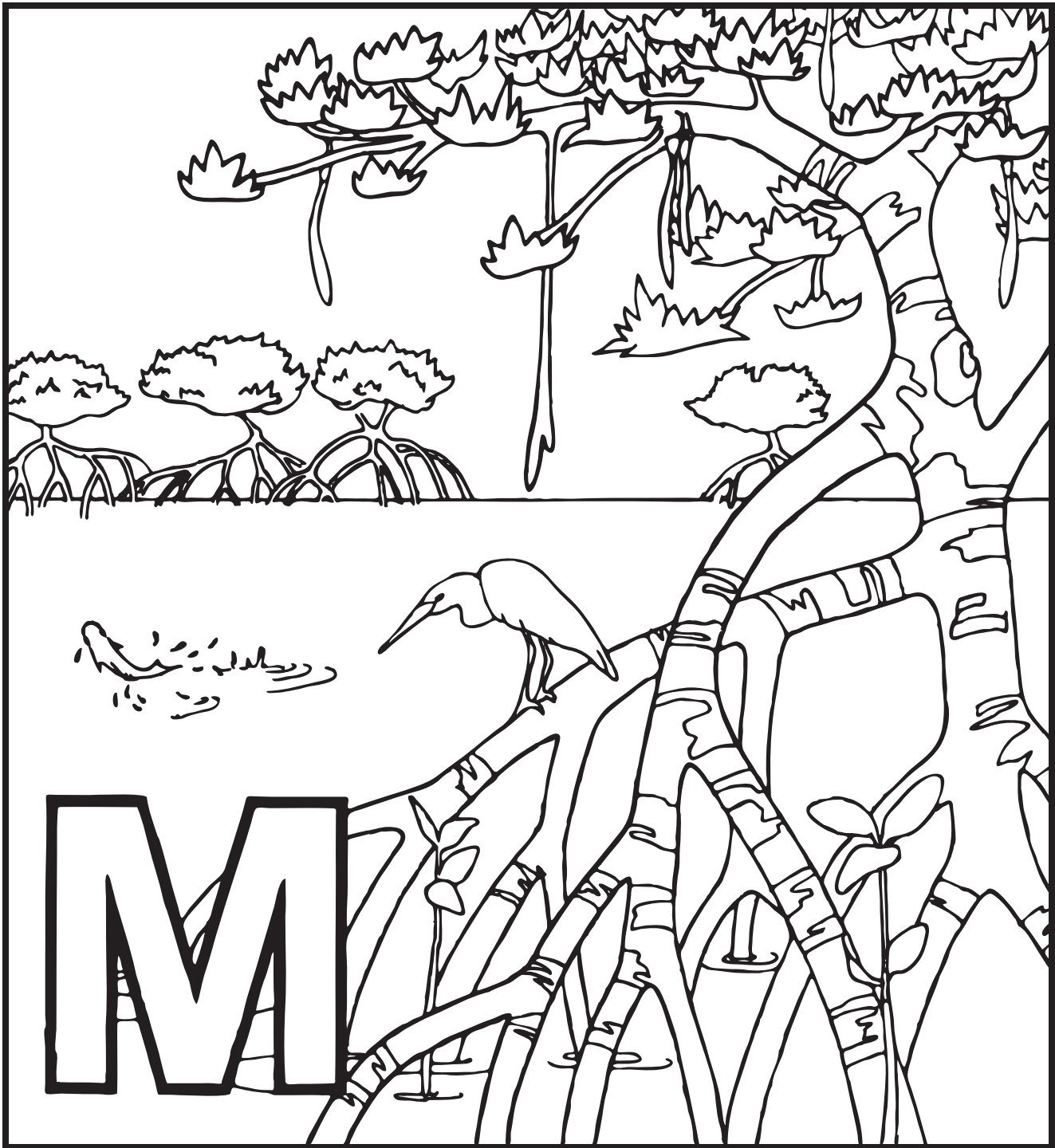


**Least sandpipers** are the smallest of all sandpipers. Flocks of sandpipers probe beach sand for buried animals. Sandpipers nest in northern tundra regions. These tiny birds migrate by the thousands south along the east coast of the United States to winter in Florida.

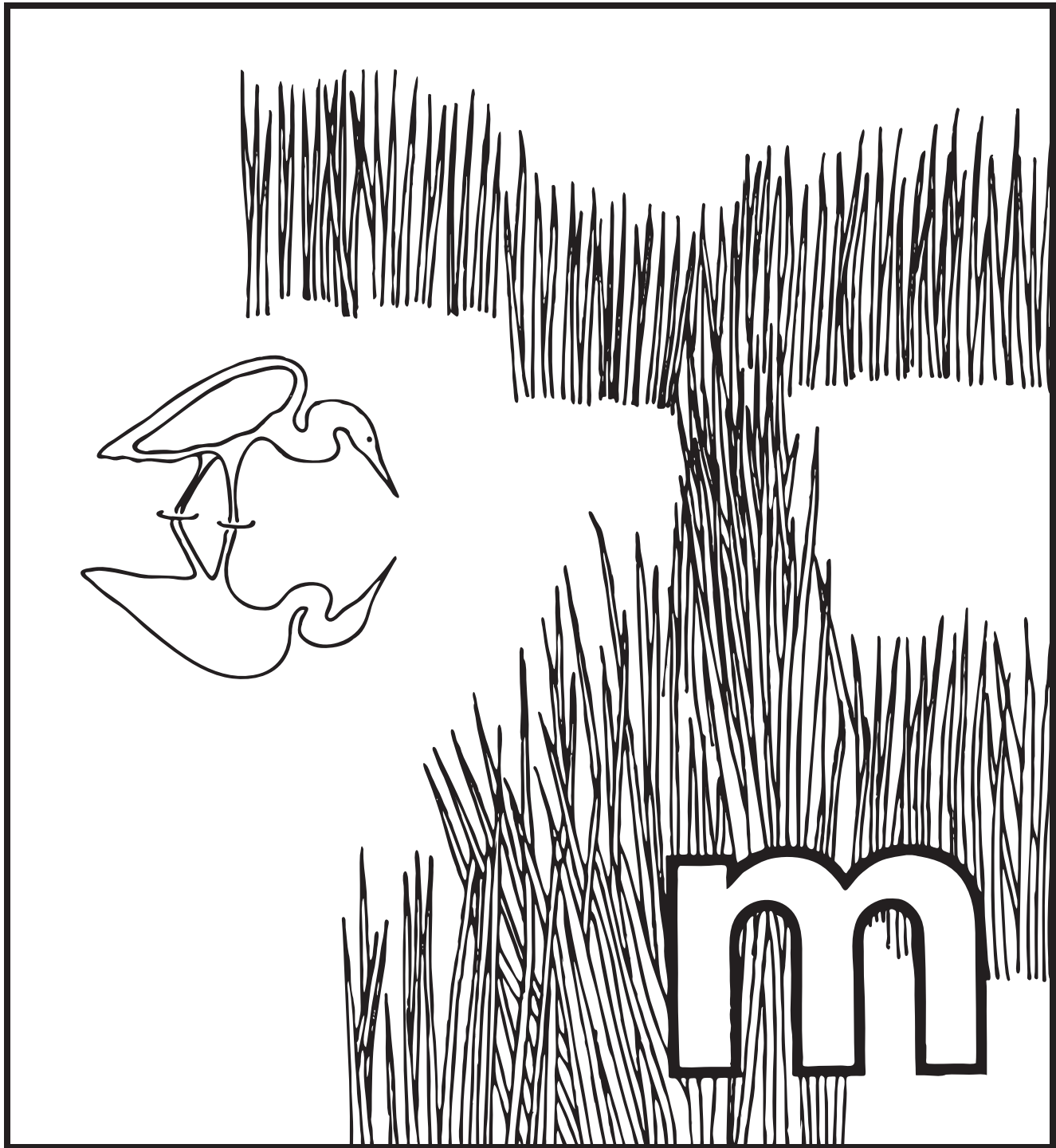


**Loggerheads** are the most common of six sea turtle species that nest on Florida beaches. These huge reptiles may each weigh up to 350 pounds. Although their heavy jaws are perfect for crushing shellfish, loggerheads also eat jellyfish, shrimp and water plants.





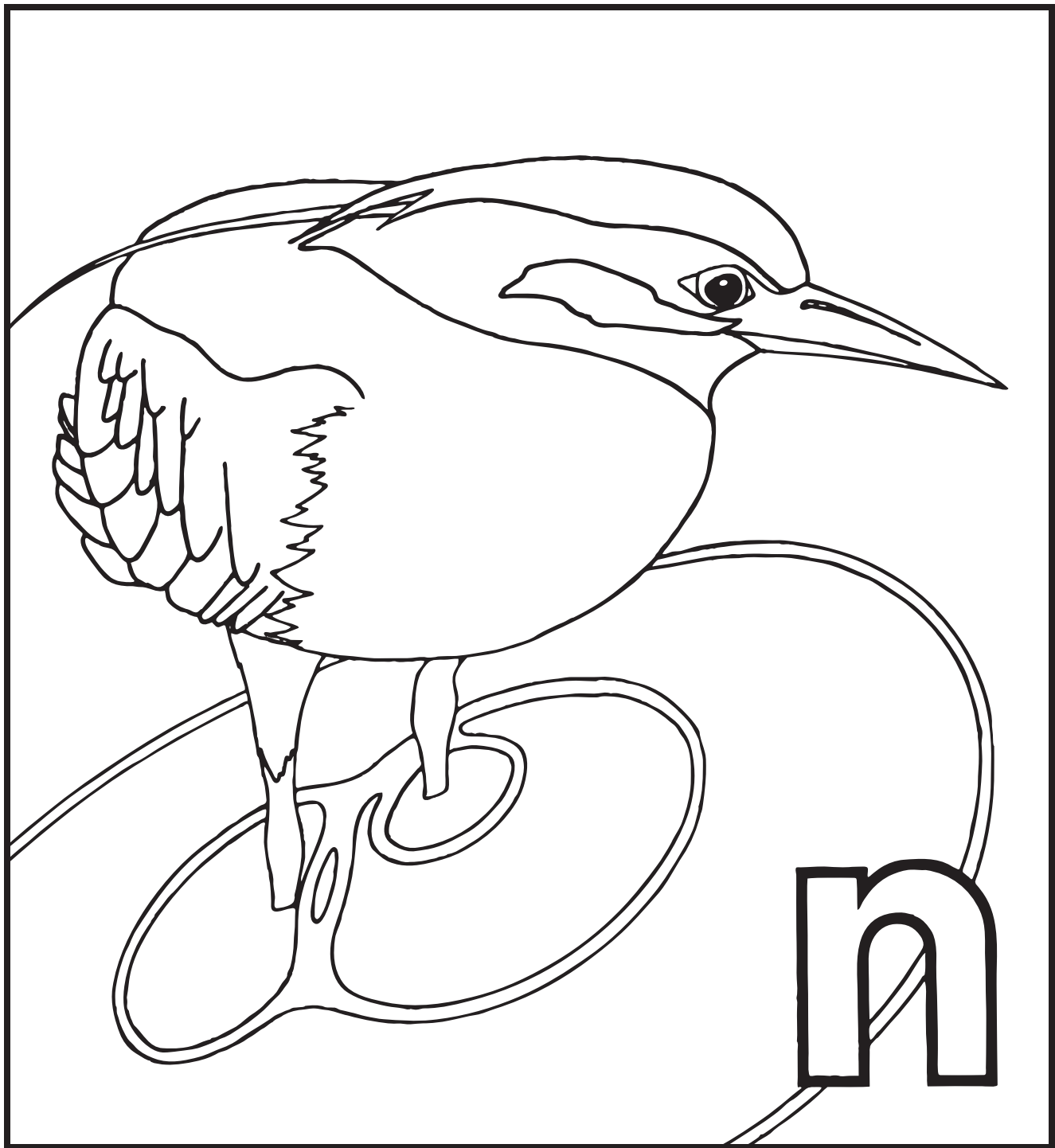
**Mangroves** are trees found in warm climates near salty water. Mangroves are valuable because they prevent erosion by anchoring soil with their roots. Many birds find shelter in their branches. Fallen, decayed leaves (detritus) of mangroves are an important food for many animals, including zooplankton and fish.



**Marsh grass** is a water-loving grass that grows in or near salt water. When this grass covers many acres, it is called a salt marsh. The salt marsh is a habitat for lots of animals, meaning it is a place that provides food and a home for living creatures. Can you name any other habitats?

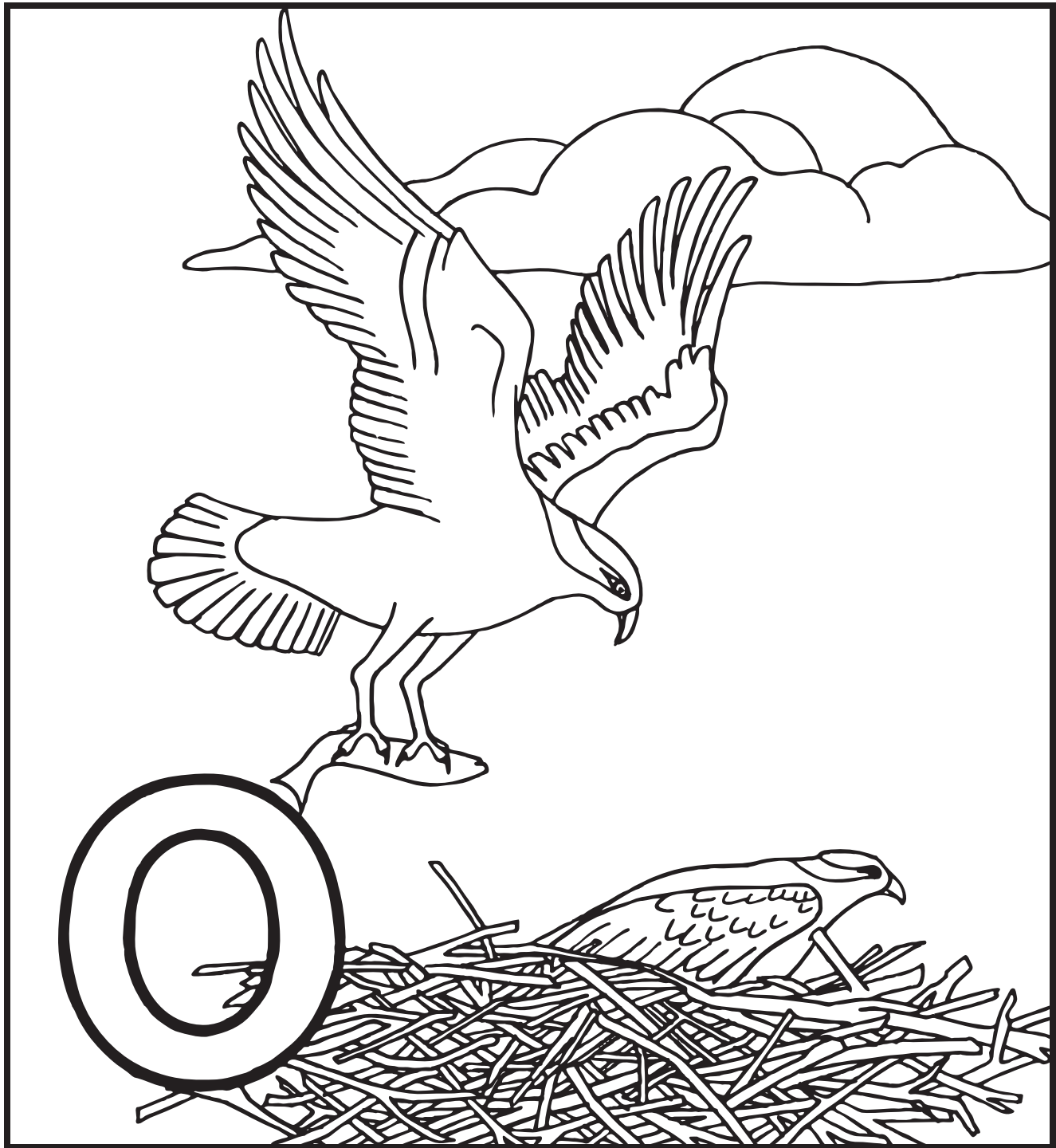


**Needlefish** are long, thin fish whose jaws form a fragile beak. These fish live near the surface in warm coastal waters. All needlefish are predators. They prefer to eat small fish. Needlefish are edible, but people seldom consume them. These fish can grow two feet in length.

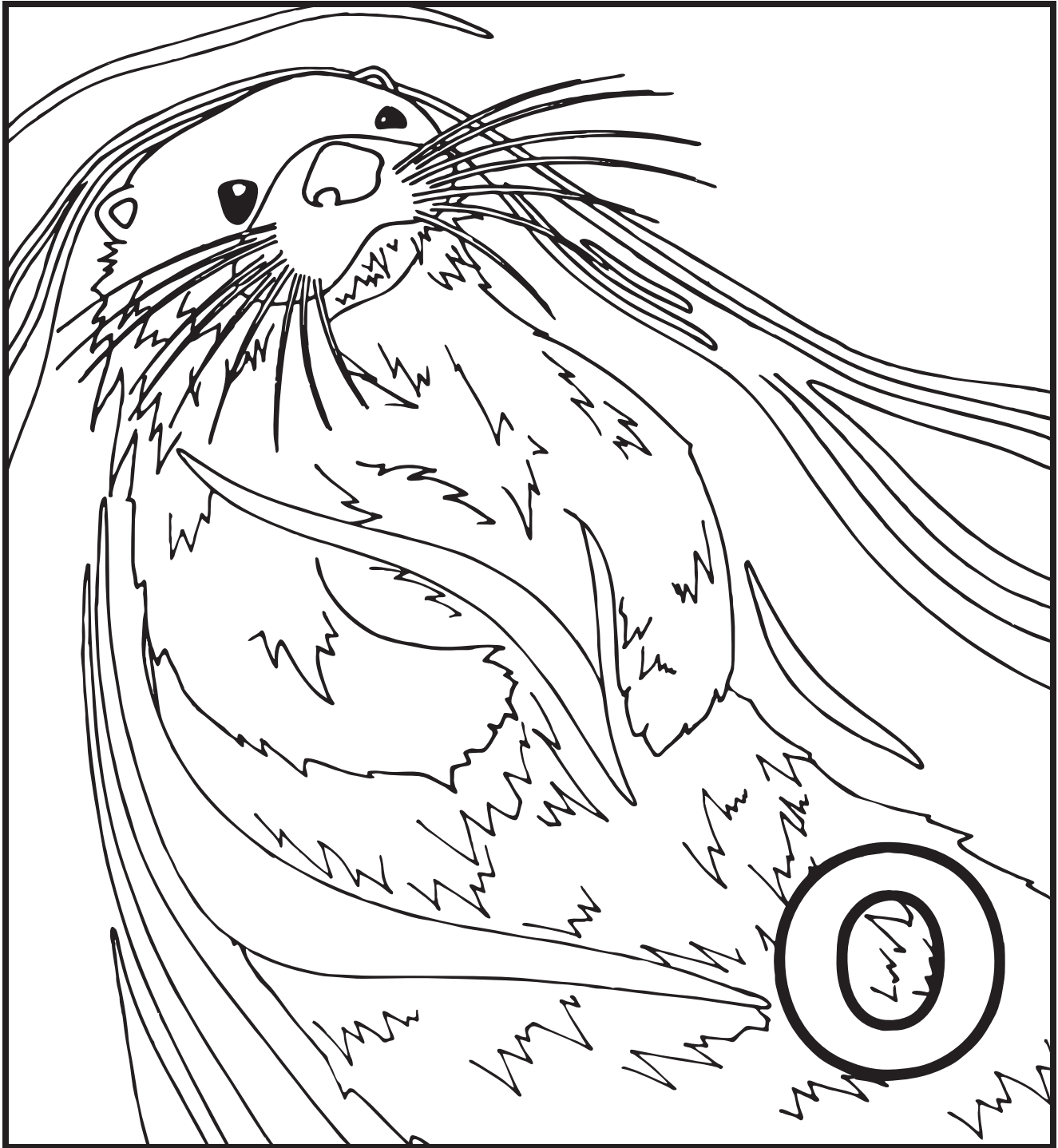


**Night herons** are night hunters. They sleep in trees during the day. Yellow-crowned night herons are recognized by their black faces and white caps. Unlike other herons, the yellow-crowned's favorite food is not fish. These herons eat crabs, especially fiddler crabs.

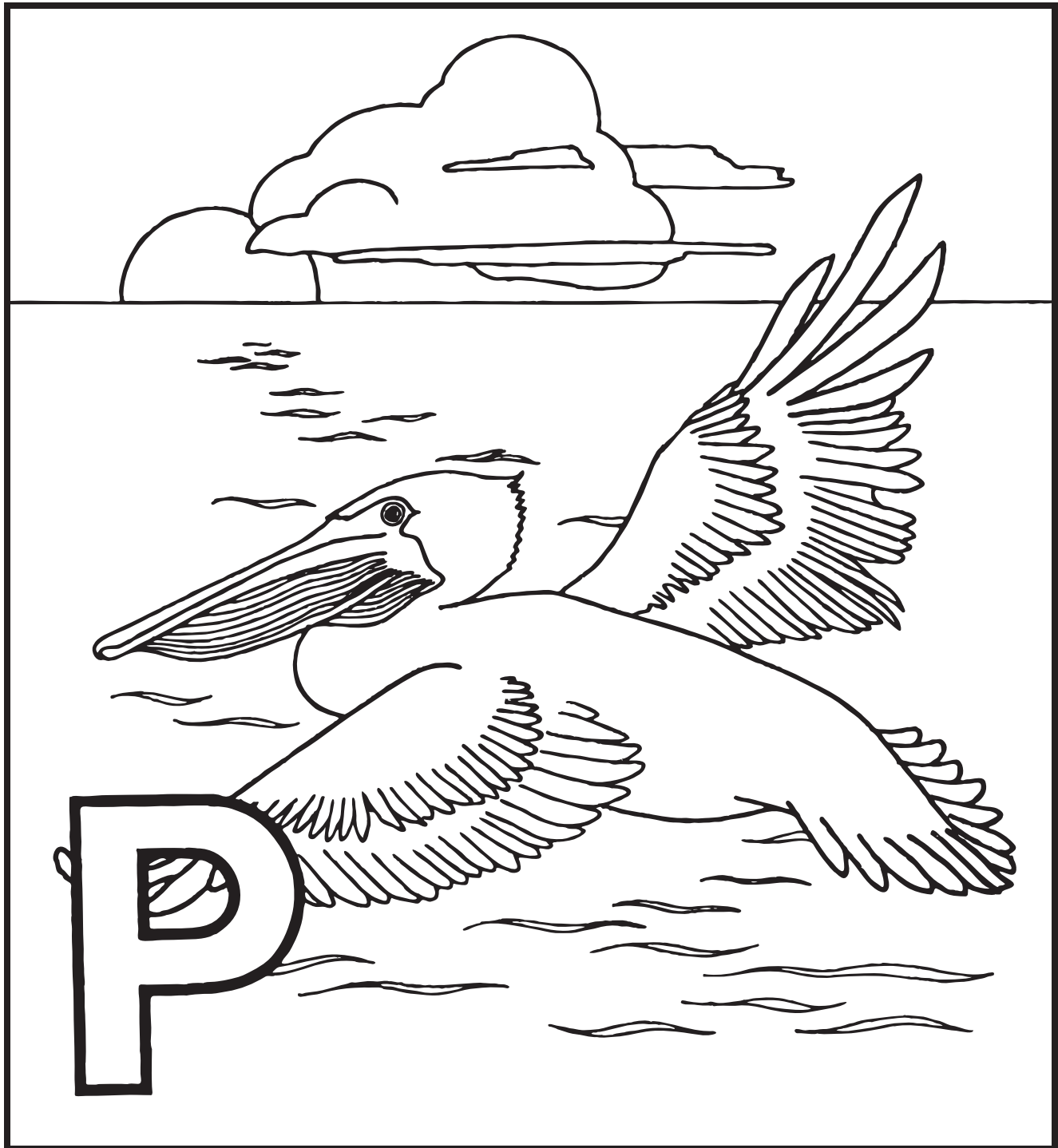




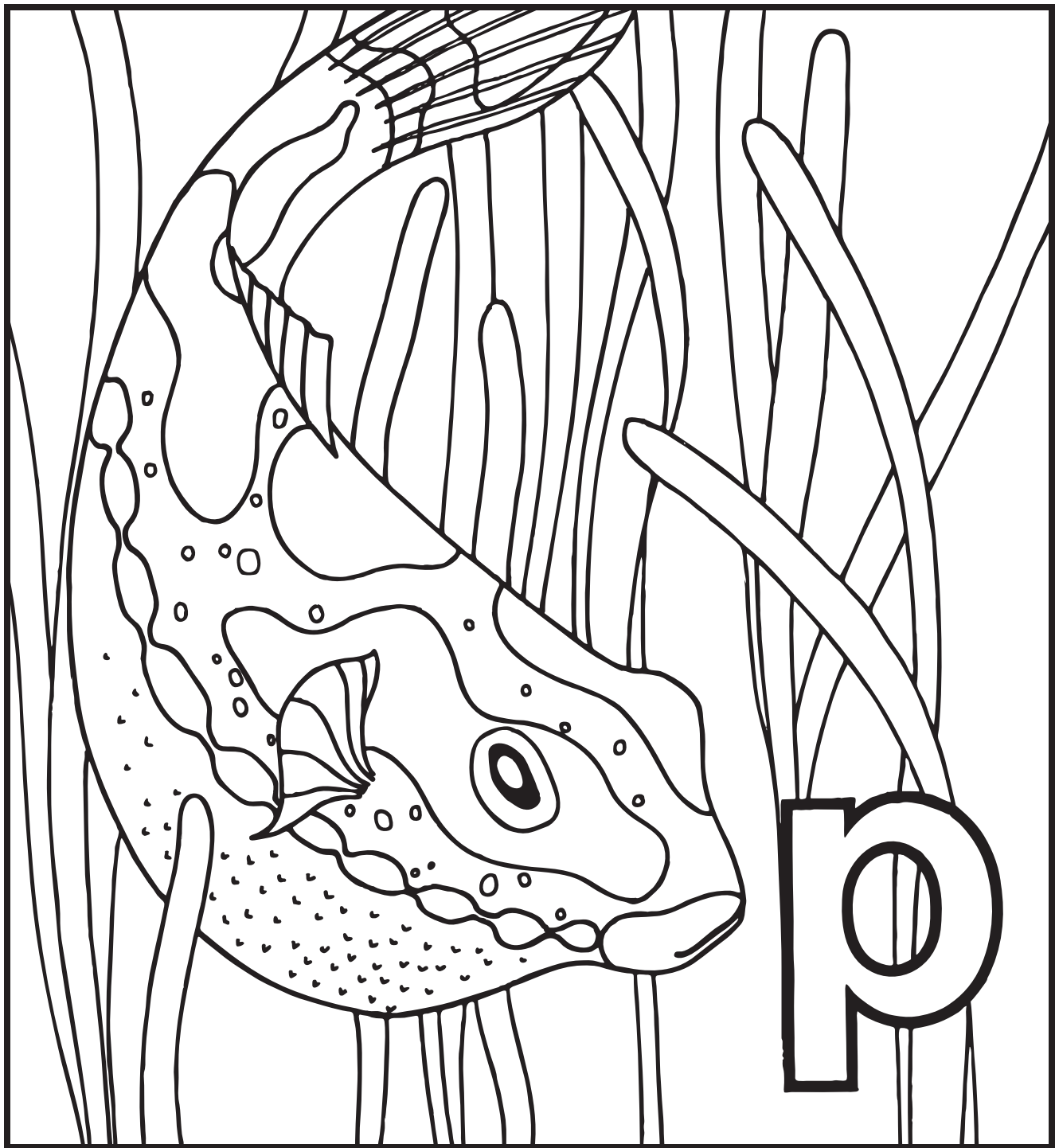
**Ospreys** are large brown and white hawks that live near clean rivers and lakes. They eat only fish. Ospreys use their keen eyesight to hunt fish. Ospreys must have clear water to spot their prey. Fish are grabbed at the water's surface with the bird's talons and flown to the nearest feeding perch to be eaten.



**Otters** are playful mammals that live in riverbank burrows. With webbed feet and rudder tails, these animals swim both forward and in reverse with amazing speed. Otters often float on their backs when eating. They feed mainly on fish, but will also catch mice and insects.

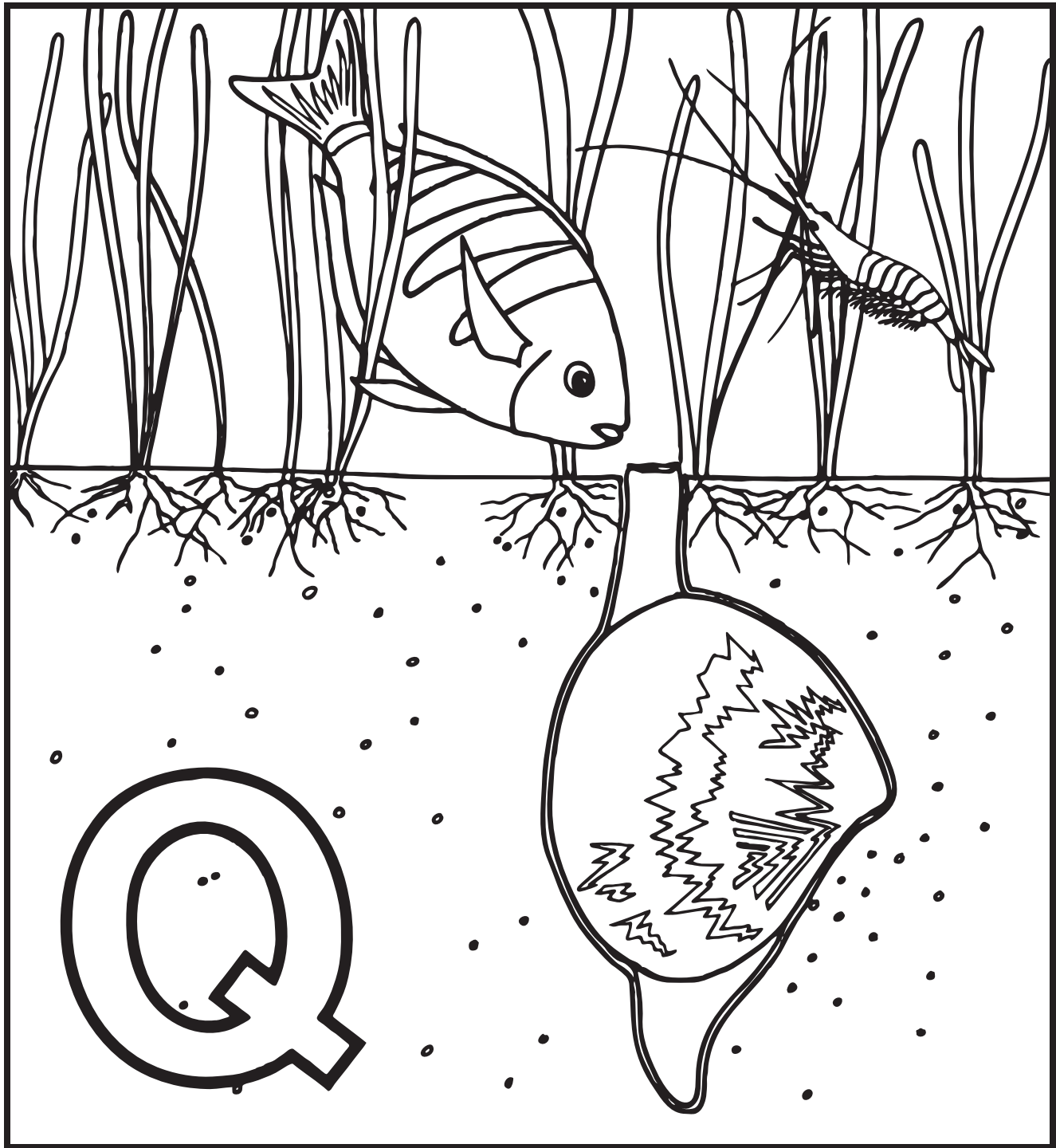


**Pelicans** are large brown seabirds that live in colonies (groups of birds). Brown pelicans fish by flying in a long line over the water. They splash into waves and scoop up fish in the large pouch under their beaks. Adult pelicans eat four pounds of fish every day. Pelicans feed on fish that people do not like to eat.

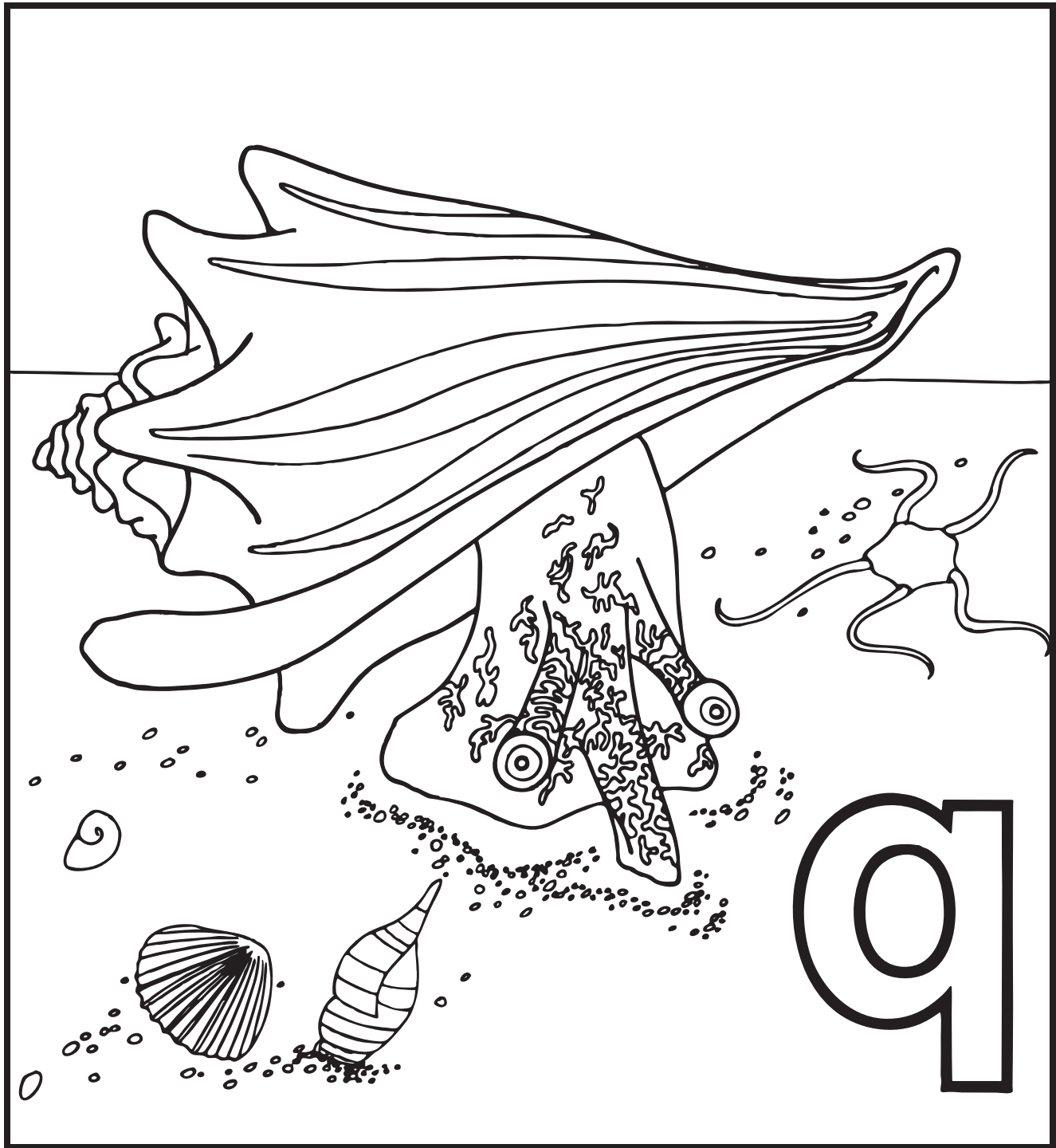


**Puffers** are fish that inflate their bellies with air when frightened, to avoid being swallowed by predators. Puffers like shallow water and are often found in seagrass beds. Their strong teeth are used to crush shellfish. Some puffers are poisonous if eaten by people.

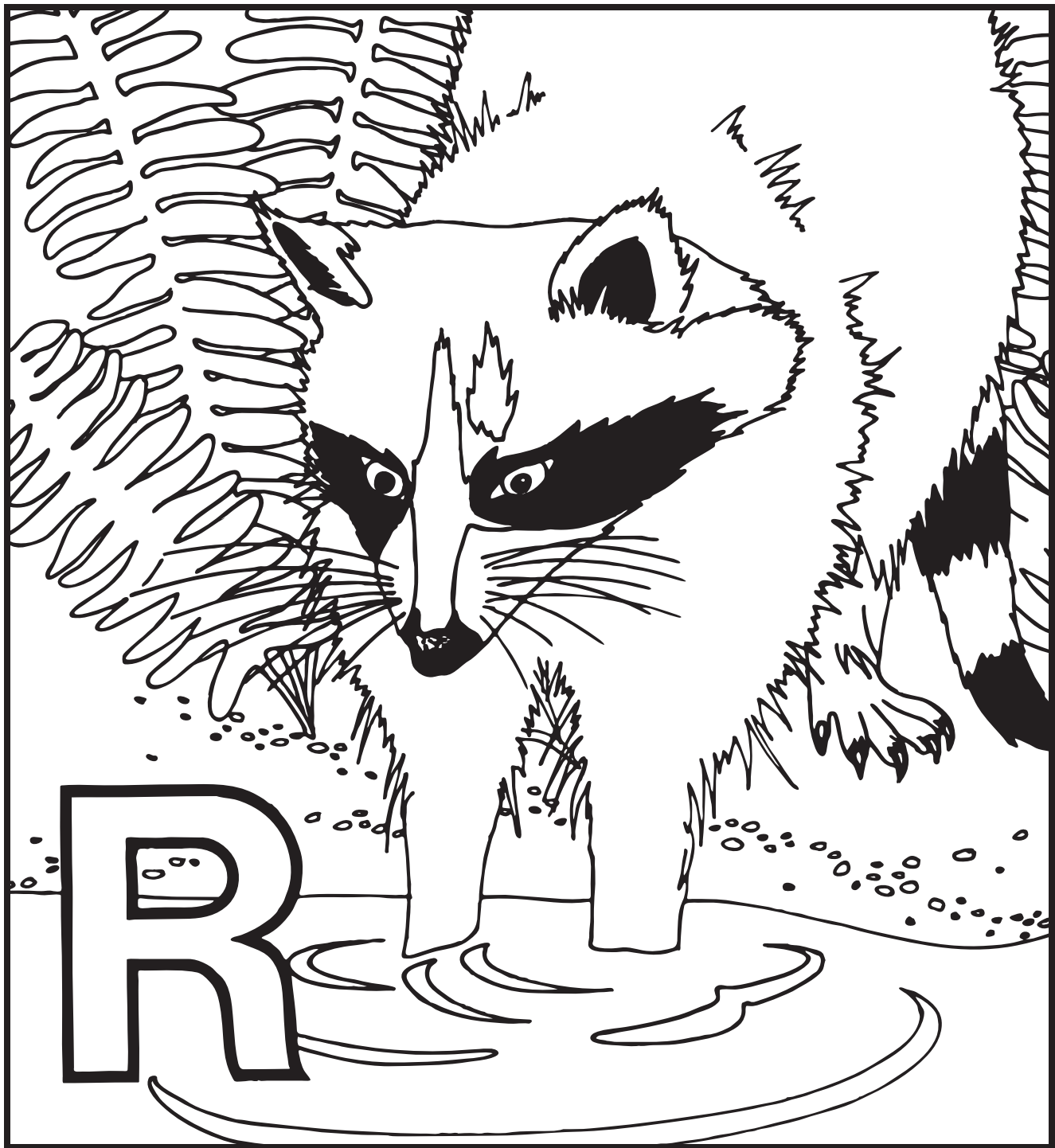




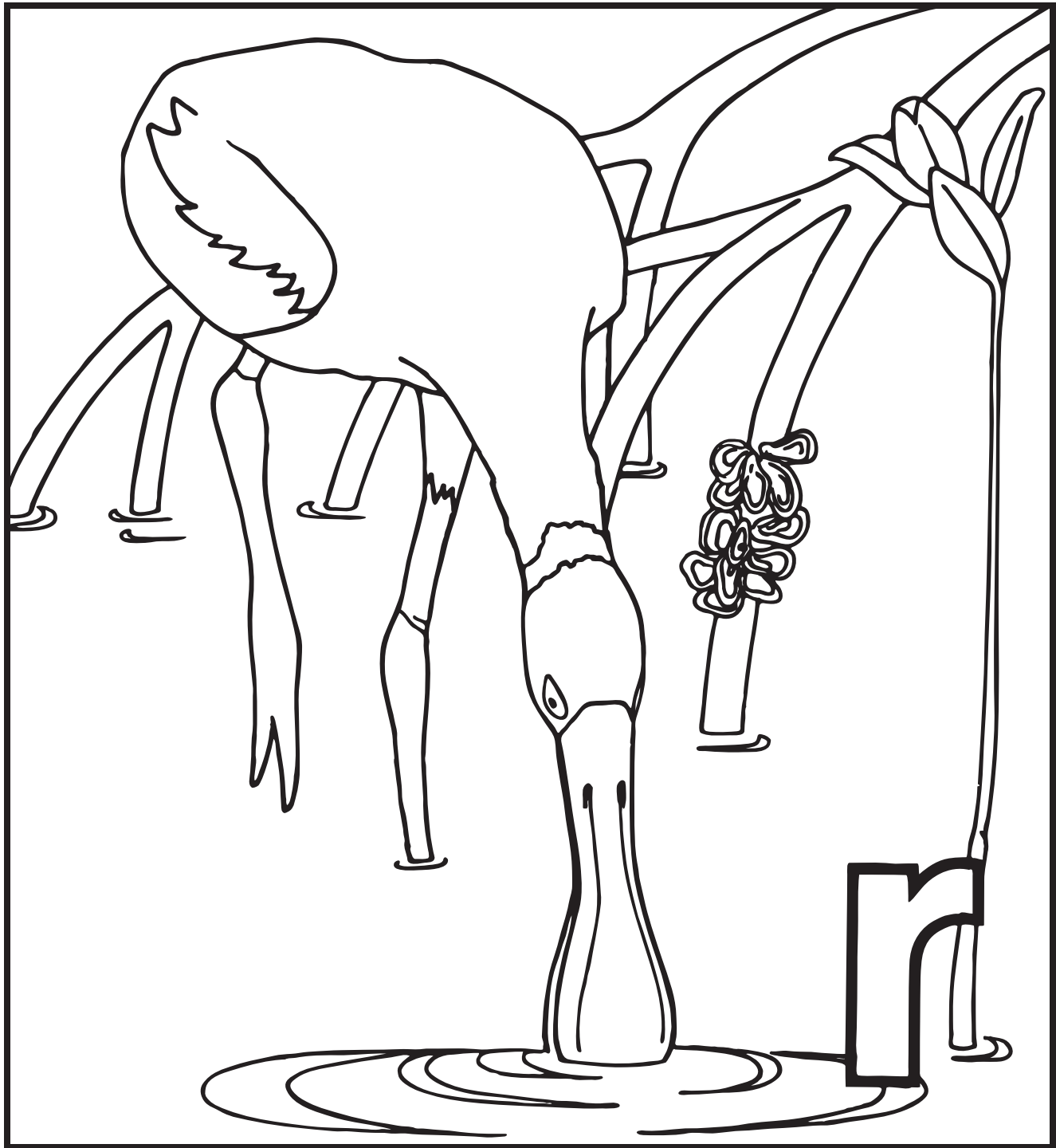
**Quahogs** are clams with bivalves. These animals have soft bodies protected by a thick shell. Quahogs have a short, muscle-like foot that they use to bury themselves in soft mud. Clams eat plankton. They extend two feeding tubes to the mud surface. As clams suck water in, they filter out plankton and oxygen through their gills.



**Queen conchs** are also called pink conchs because their inner shells are pale pink in color. Conchs live only in tropical waters. They are scavengers, finding dead crabs and clams with a keen sense of sight and smell. People collect conchs for the shells and meat.

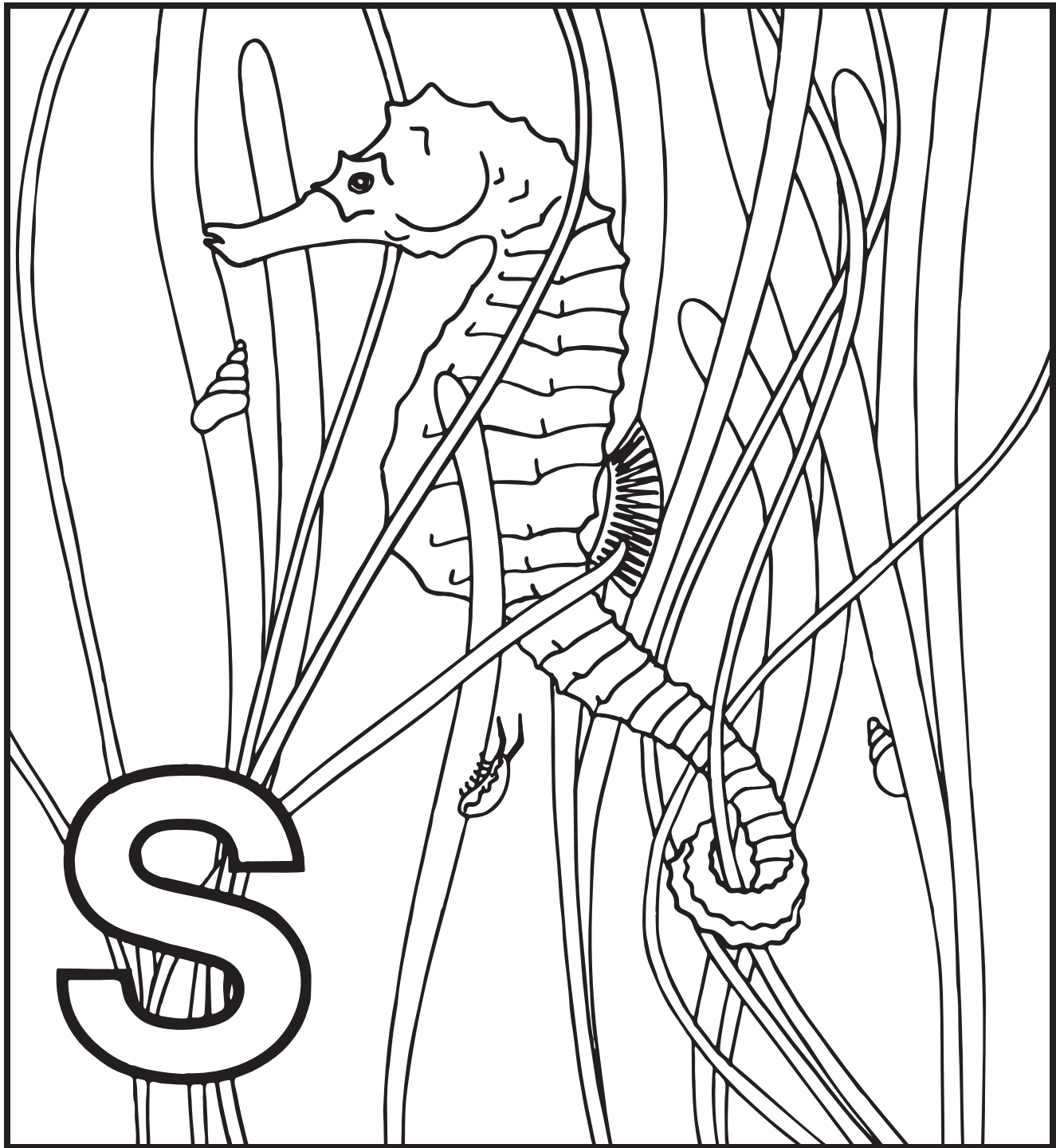


**Raccoons** are nighttime hunters. They are omnivores, eating everything from oysters to wild grapes. Raccoons dip their food into water before eating. By wetting its front paws, the raccoon is better able to feel its meal. It can then tear away parts that are not edible.

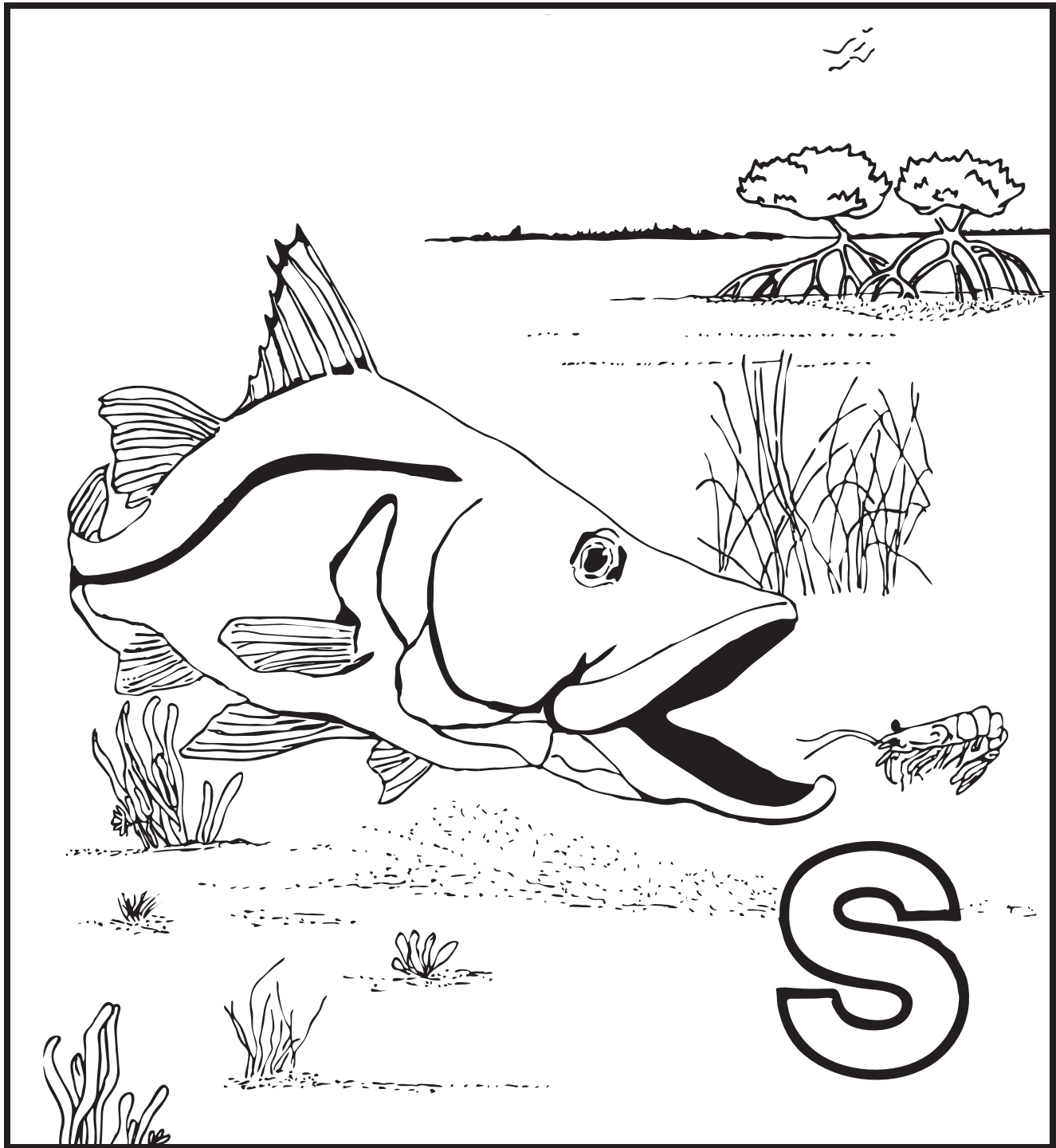


**Roseate spoonbills** are large pink and white birds. They hunt for food by swinging their spoon-shaped bill through shallow waters. This six-inch-long beak is very sensitive to touch. It allows them to feel for small fish, crabs, shrimp and water insects.

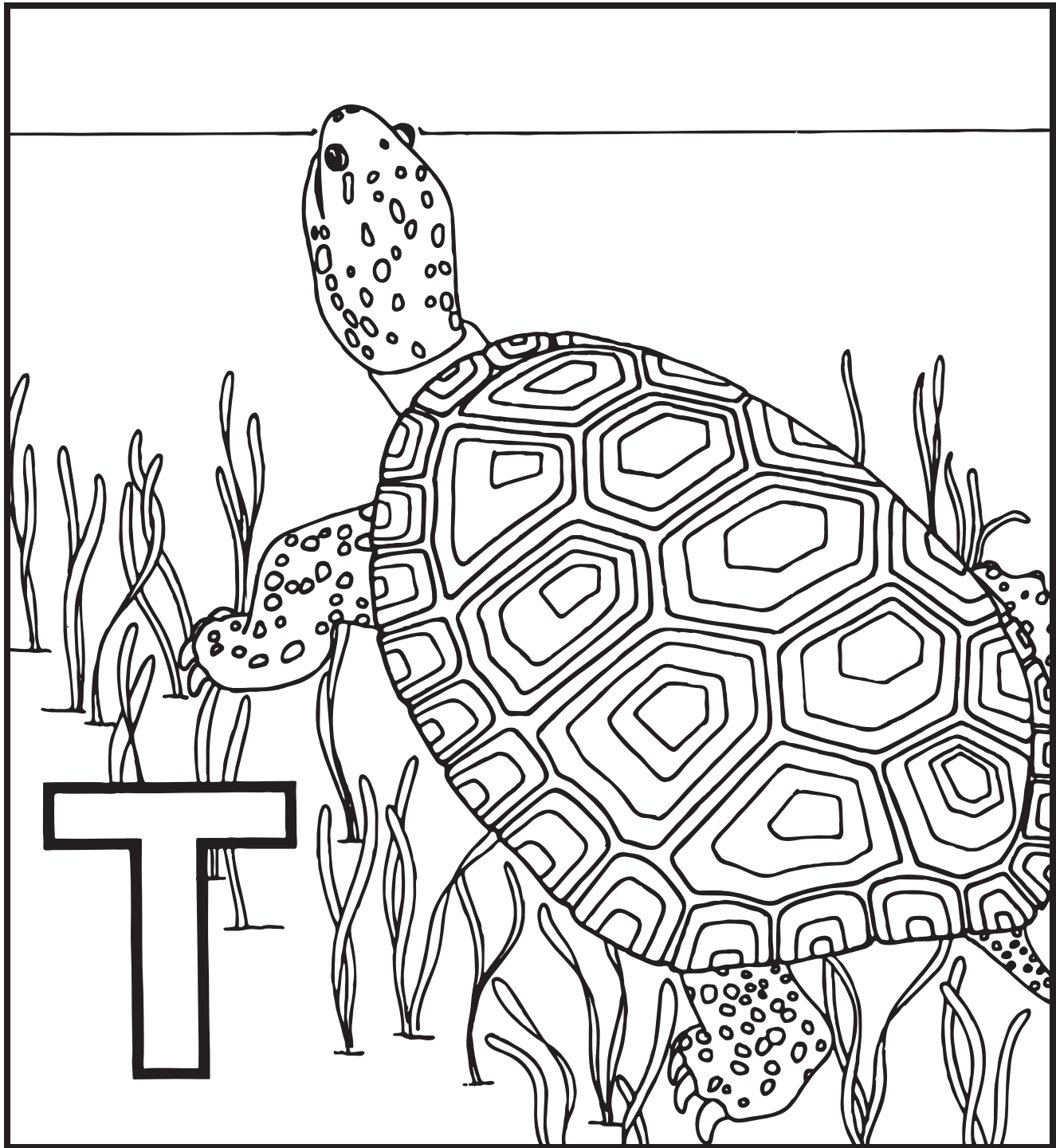




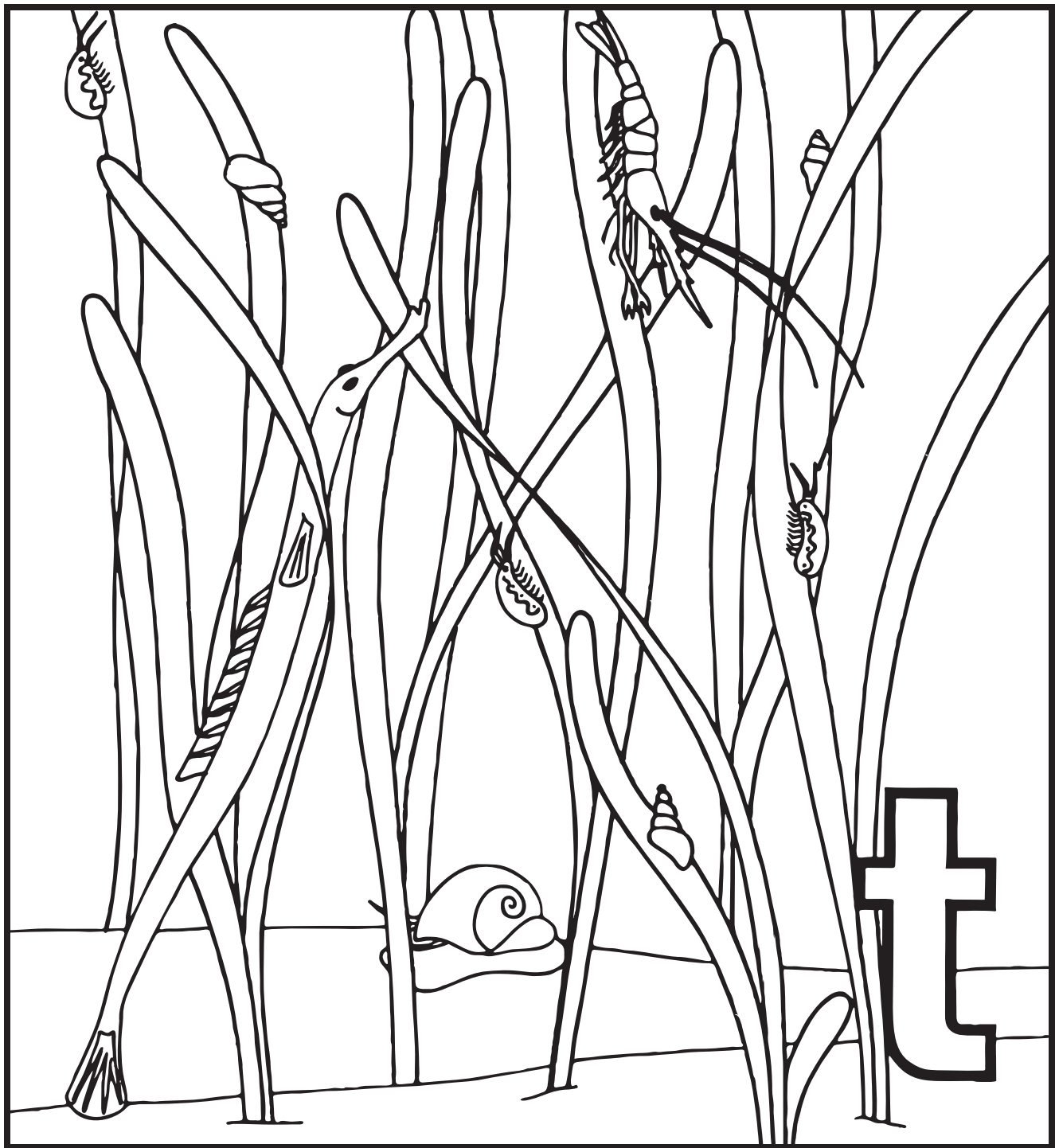
**Seahorses** are small, weak, swimming fish that live in seagrass beds. They curl their tails around seagrass blades and wait for food to float past. Seahorses eat by sucking water rapidly into their snouts, pulling in small fish, shrimp and zooplankton.



**Snooks** are a type of saltwater fish that live in warm water in central and south Florida. They are found throughout the Indian River. Snook like shorelines lined with mangrove trees. They mostly eat small mullet and shrimp. Snook are spectacular, hard-fighting sportfish. The world record snook, caught in Costa Rica, weighed over 53 pounds.

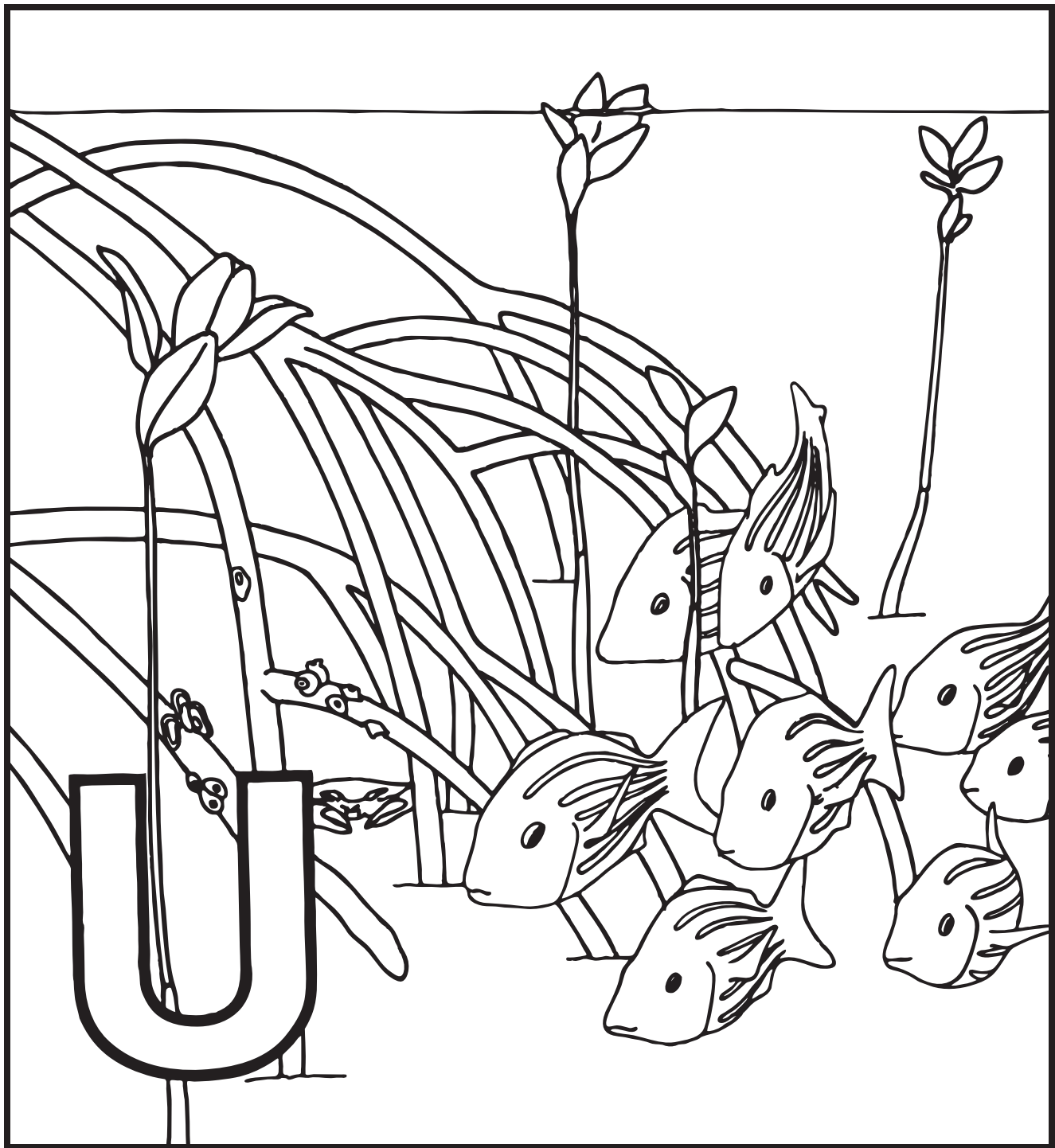


**Terrapins** are turtles that live only in salt water. They are found in quiet waters of bays and estuaries. Like all terrapins, the diamond-backed terrapin feeds underwater. They eat snails, clams, worms and water plants. These turtles were once hunted to near extinction for their meat and eggs.

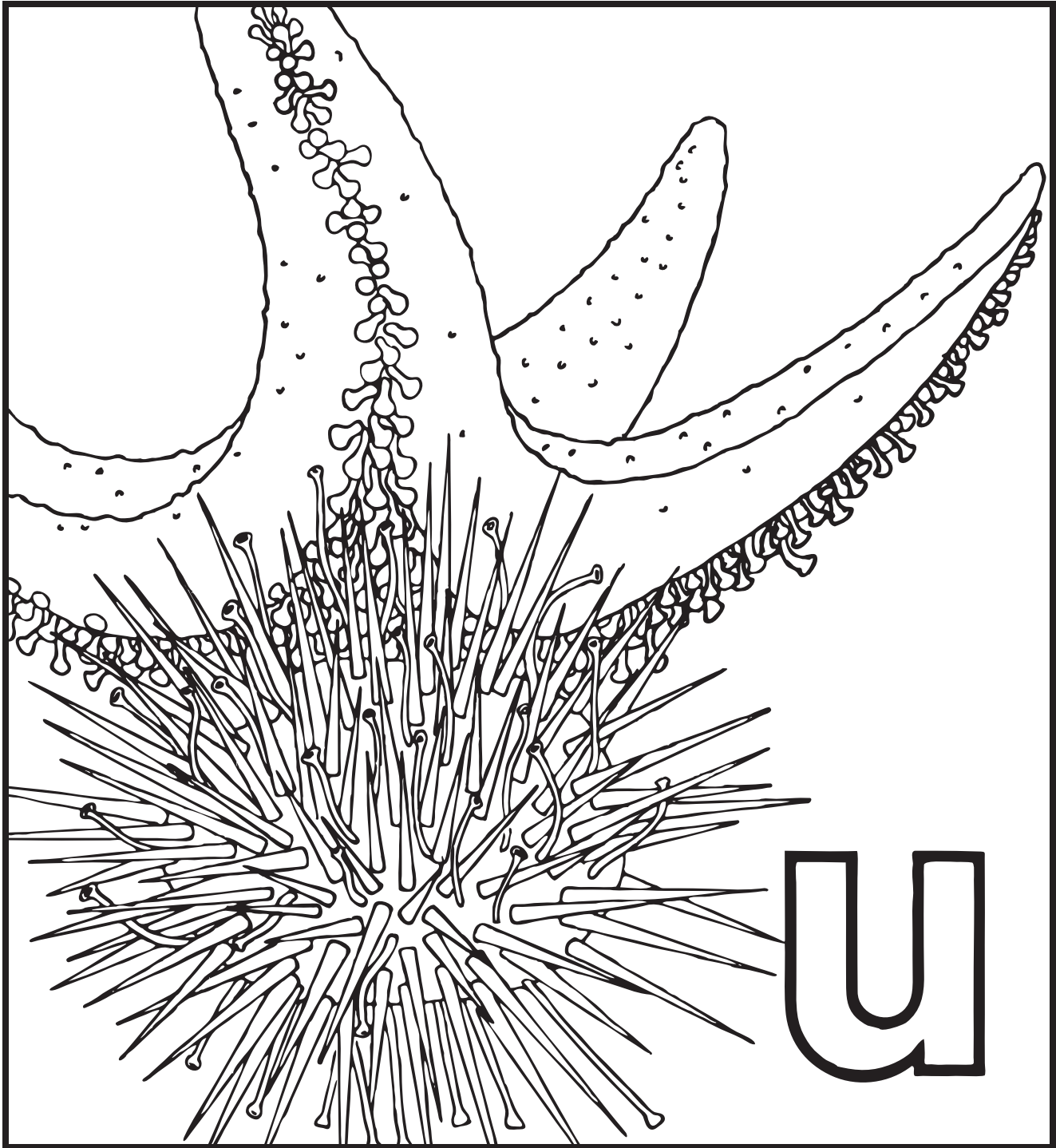


**Turtle grass** is one of seven types of seagrasses that grow in Florida's shallow estuaries. Seagrasses are the lawn of the sea. Their root systems keep waters clear by holding soil in place. These underwater plants also provide food and cover for marine animals, especially young fish and crabs.

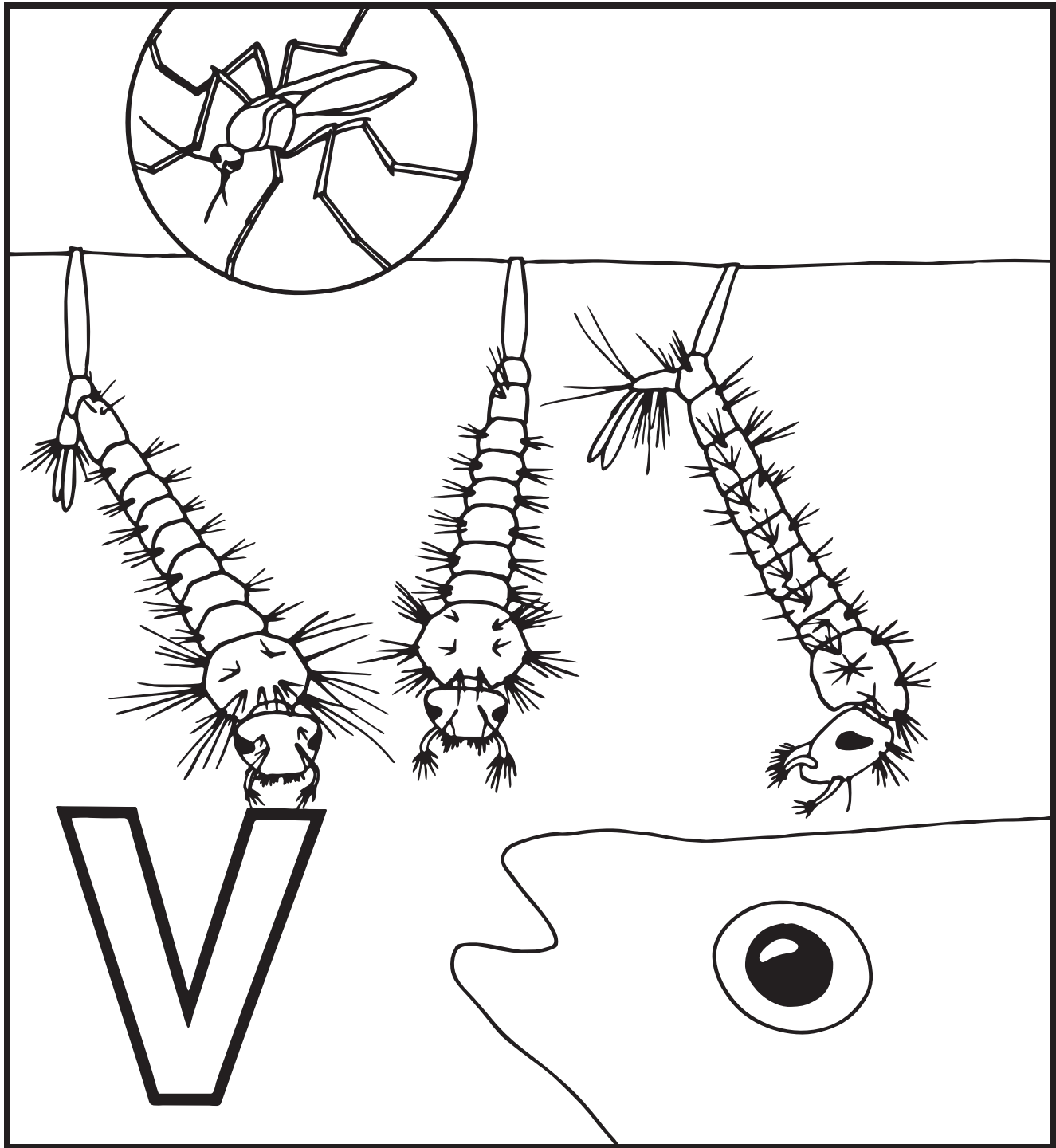




**Underwater areas** provide food for land and water animals. For example, man eats fish, fish eat shrimp and shrimp eat detritus (decaying plants). This is one example of a simple food chain. All living things in nature depend upon each other for survival.



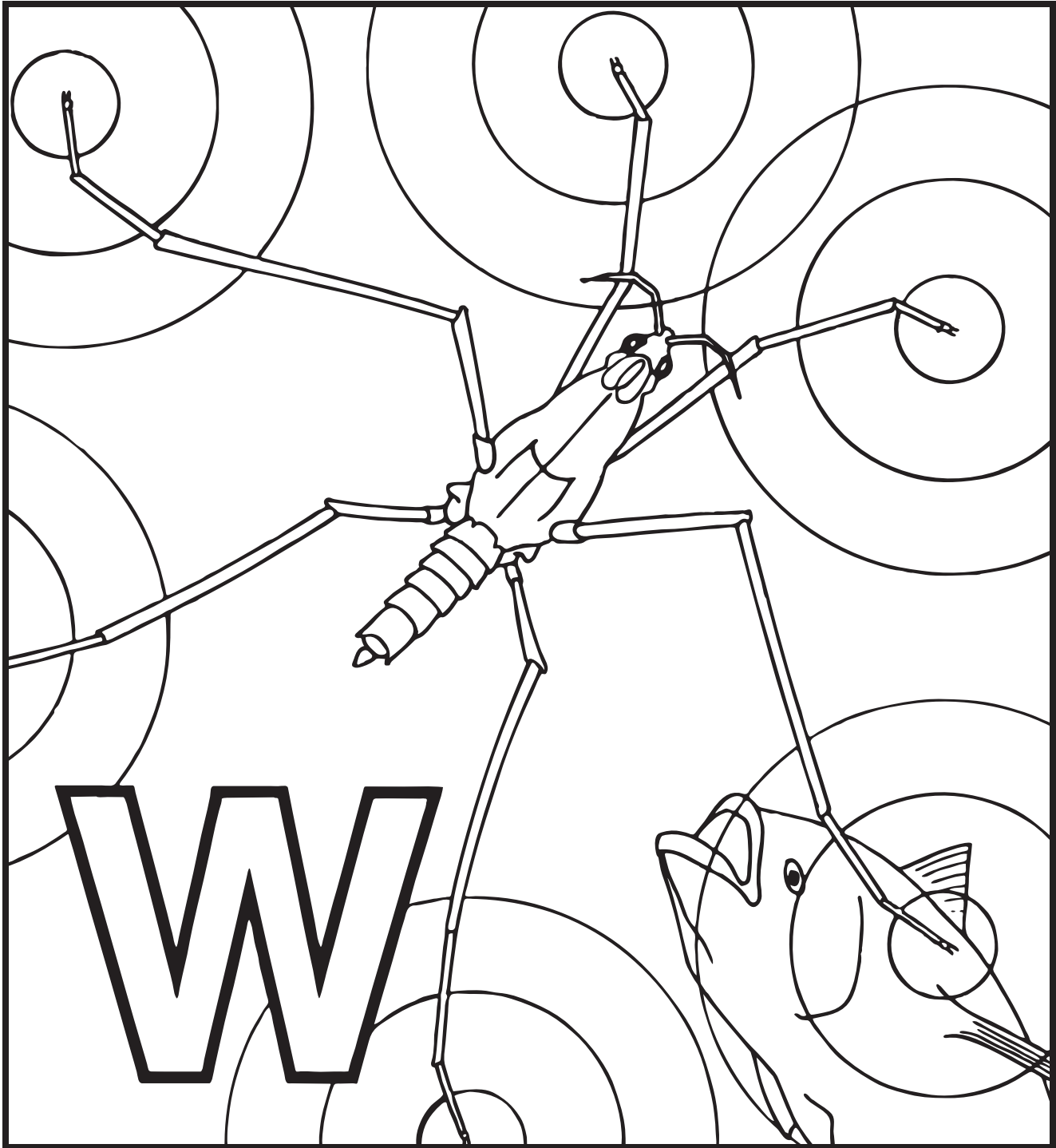
**Urchins** are a type of echinoderm, relatives of the starfish and sand dollar. All echinoderms have shells covered with skin and spines. What could eat this living pin cushion? Starfish are the main predators of sea urchins. They break off the spines one by one, leaving the urchin defenseless!



**Vectors** are animals that can carry harmful diseases. The mosquito is an example of a vector. Although mosquitos may cause sickness in humans, they are an important part of nature's food chain. Many fish, frogs and salamanders rely on mosquito eggs and larvae as food.

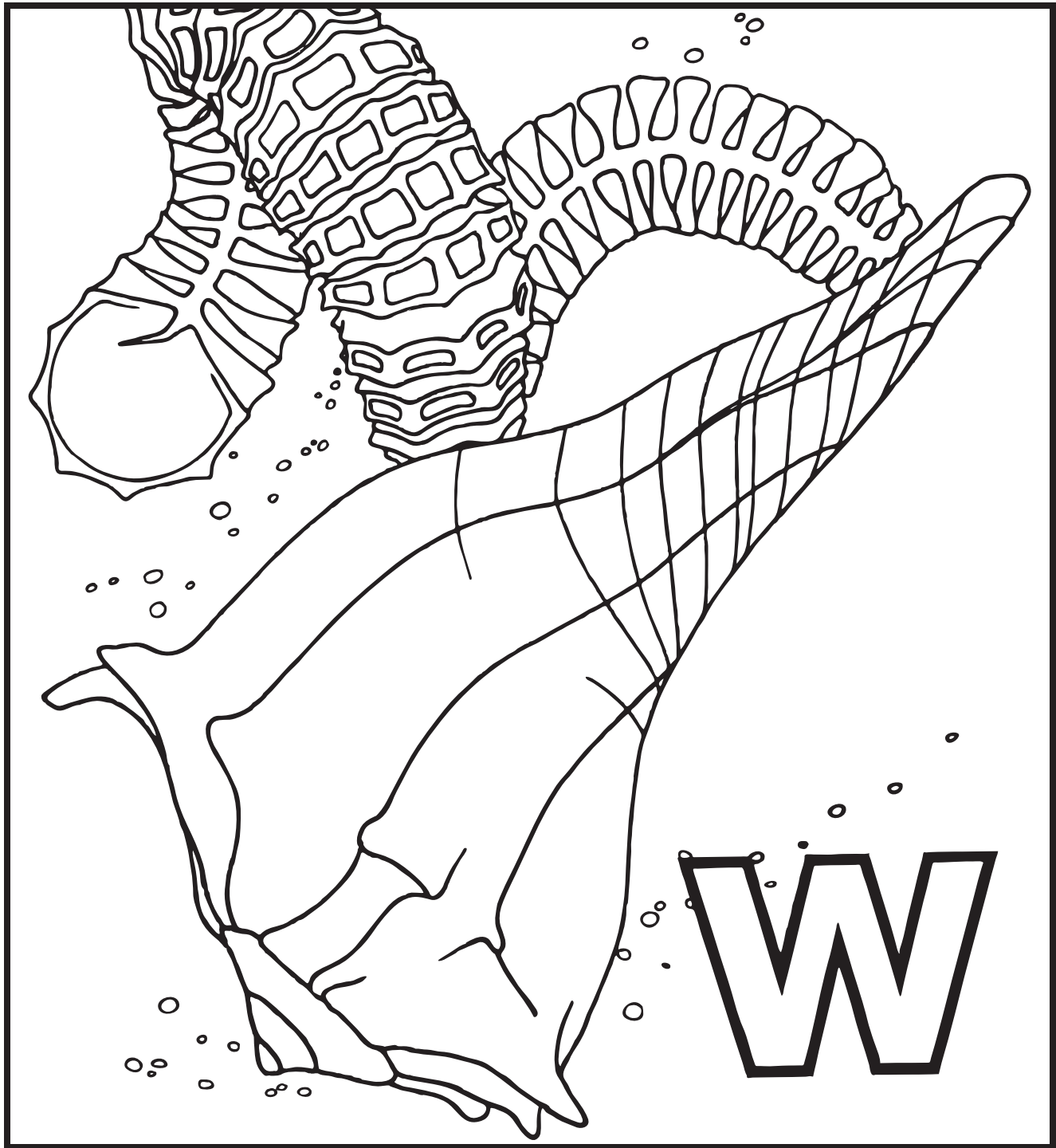


**Vultures** are large black birds with red, featherless heads. These scavengers are strong flyers, often soaring high above the ground for hours. Their main food is carrion (dead animals). Vultures use keen eyesight and a keen sense of smell to locate prey.

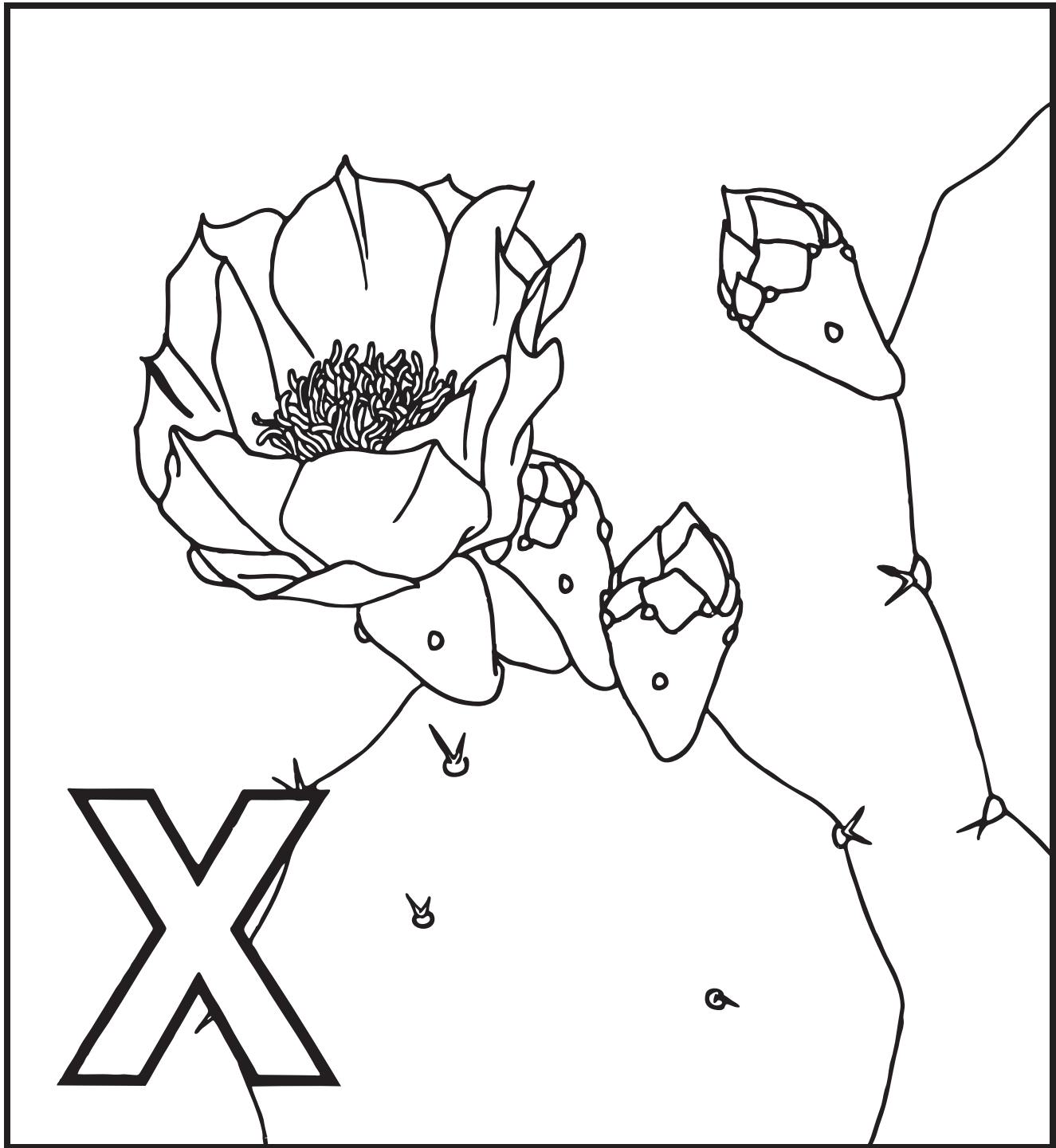


**Water striders** are long, thin water bugs commonly seen on the surface of calm waters. These insects swim by rowing with their middle legs. They steer with their hind legs. Their forelegs capture small prey. Marine water striders are the only insects known to live on the open sea.





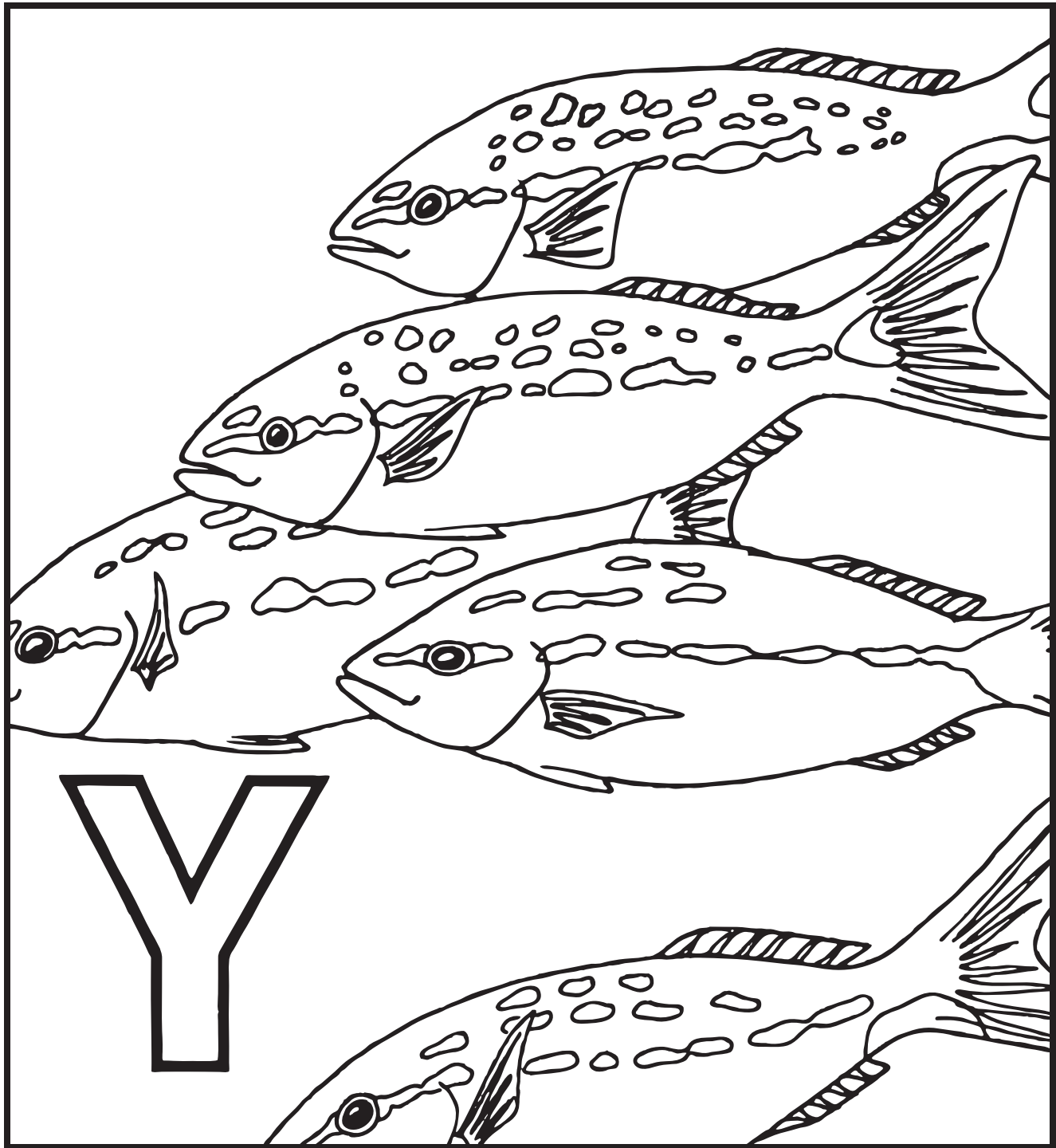
**Whelks** are underwater snails. Most whelks are carnivores (meat eaters). Whelks wedge open clam shells with their own shells, like a can opener. Then they eat the clam's soft inner tissue. Whelks, and their paper-like spiral egg cases, are found in seagrass beds and on underwater mud flats.



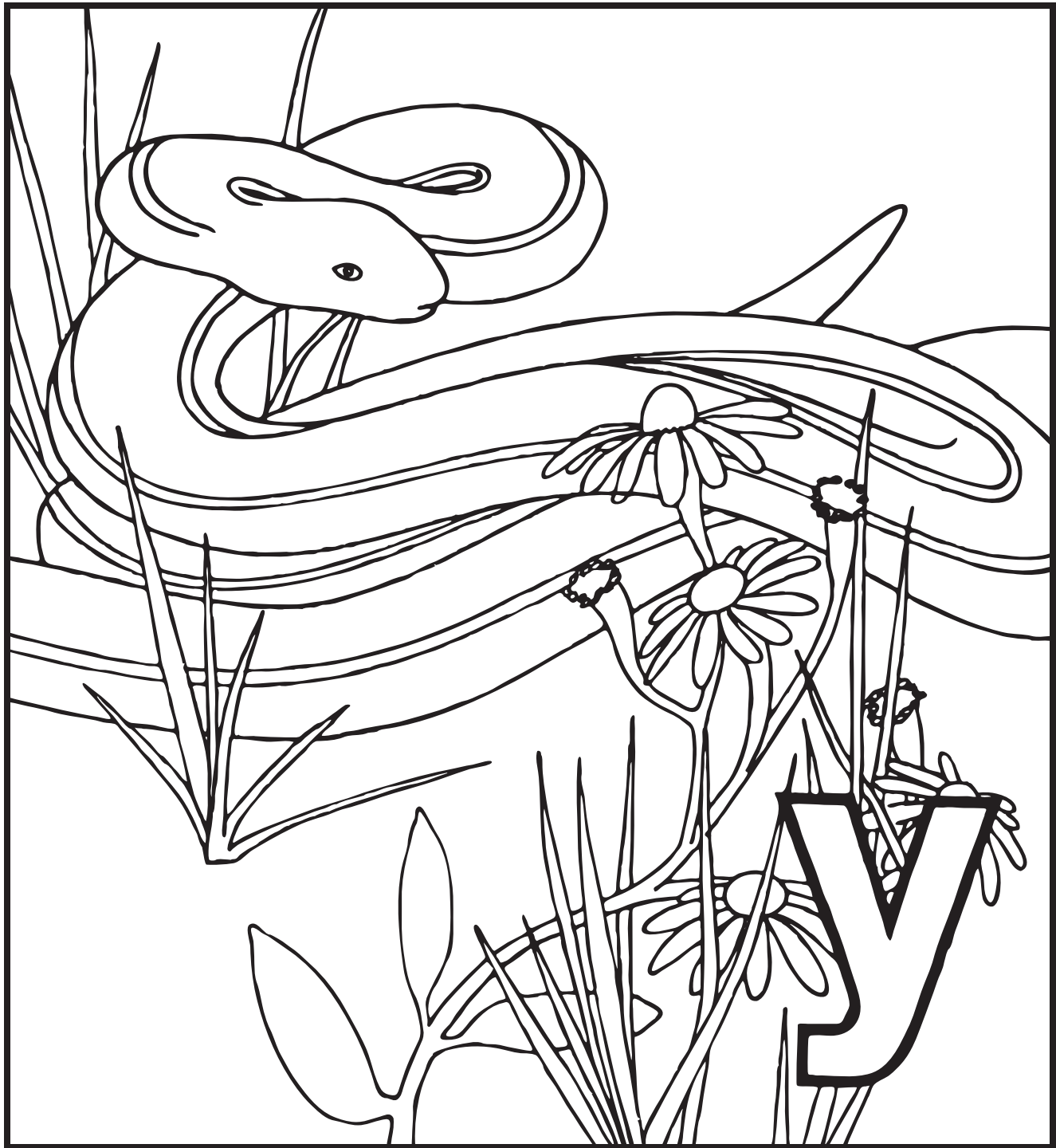
**Xerophytes** are plants that can live in very dry surroundings. Like many xerophytes, the leaves of the prickly pear cactus are perfect for holding water inside the plant. They are very thick and have a waxy surface. Prickly pear's bright yellow flowers appear during Florida's rainy season, in early spring and summer.



**Extinct** means a living thing no longer exists on our planet. When a plant or animal becomes extinct, it is gone forever.

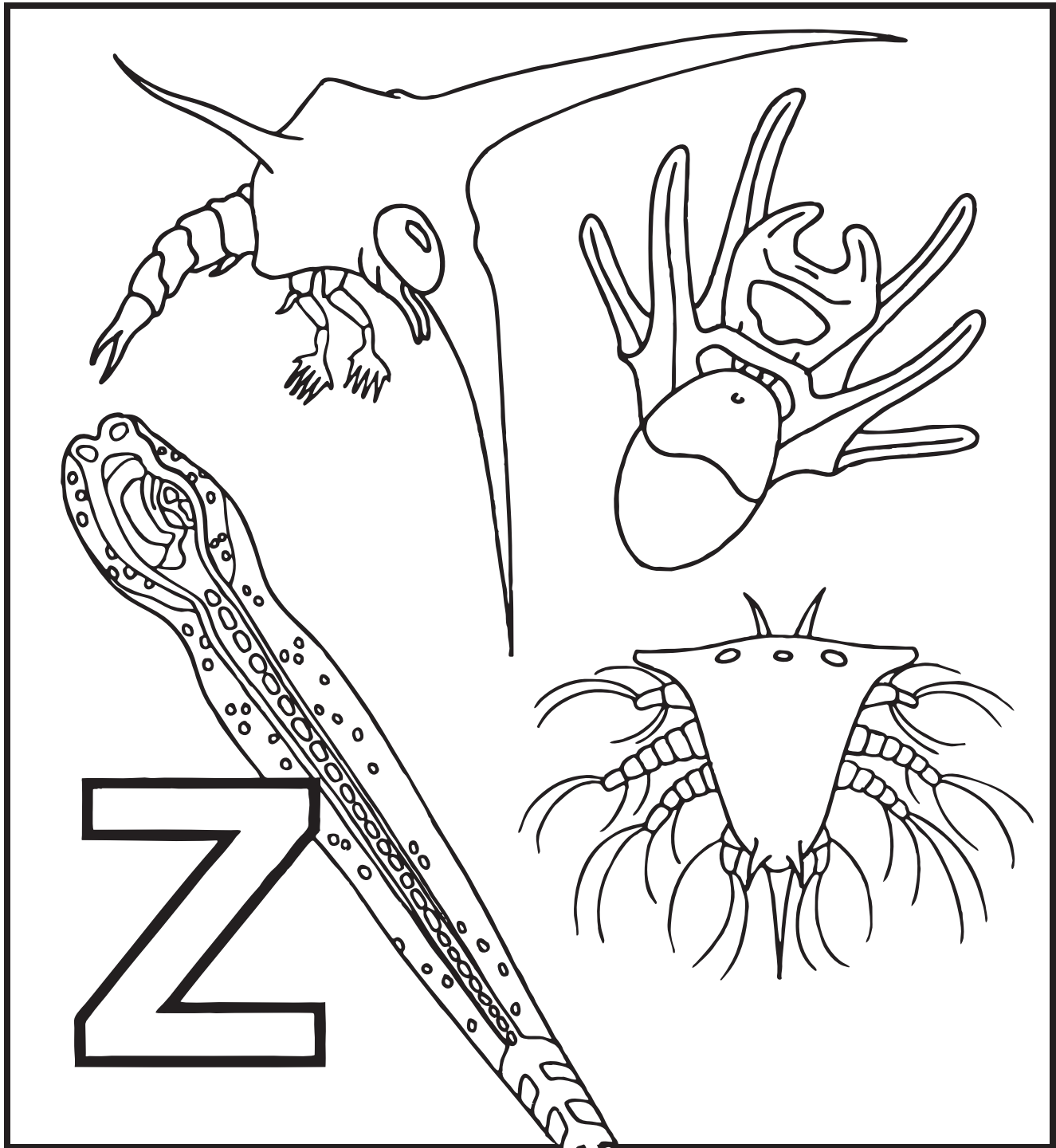


**Yellowtail snappers** are a fine food fish named for their bright yellow tails. This common reef dweller lives in open water. The young find shelter in seagrass beds. Like most snappers, yellowtails are carnivorous (meat eaters). They dine on fish, shrimp, crabs and marine worms.

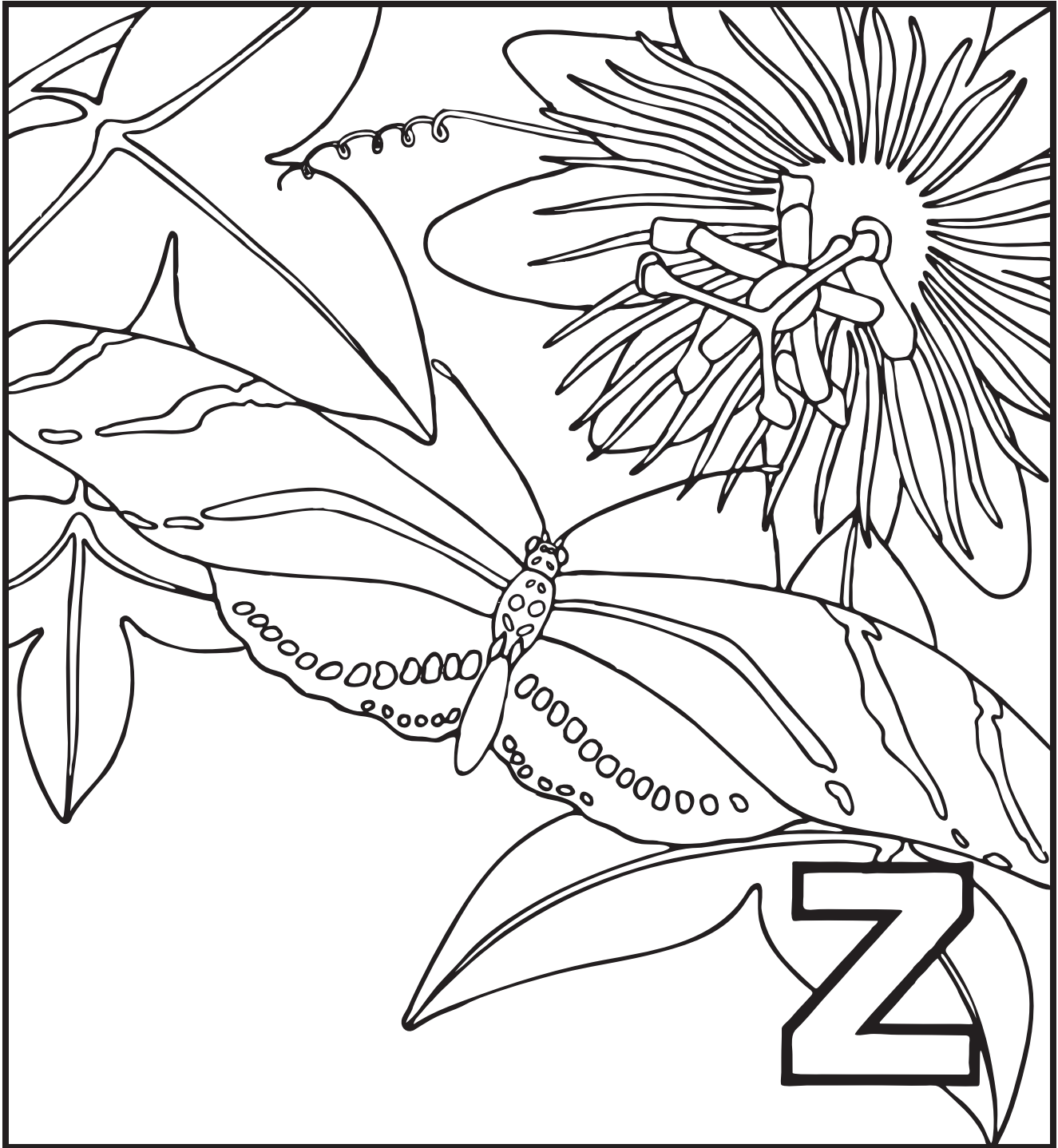


**Yellow rat snakes** are long yellow snakes with four black stripes on their backs. This harmless reptile is one of the best climbers of all snakes. They are found high in trees, searching for birds, eggs, lizards and small animals. They are named for their favorite food, rats!





**Zooplankton** are many kinds of very small animals that float freely in ocean waters. Some of these animals are small only when young, growing to full-size as adults. Baby crabs and jellyfish are examples of zooplankton. All filter-feeding marine life, including clams and whales, eat zooplankton.



**Zebra butterflies** have black wings with bright yellow stripes. Passion flowers are their favorite food. Adults sip their nectar and gather pollen. Larvae feed on the passion flower blossoms. Zebra butterflies can be found in Florida's forest edges and scrub habitats.

