Great Blue Heron

Description: Large shorebird (3-4 ft tall) with long slender bill, neck, and legs; grey to blue; often seen standing motionless in shallow water

Diet: Secondary to Tertiary Consumer--Mostly fish, but also insects, small mammals, and frogs

Habitat: Near shallow lakes, rivers, or wetlands in North America

How does it change its environment?

- Builds large nests in groups, called rookeries, in tall trees

Adaptations

- Long, slender legs to wade into water
- Large, strong wings allow for extended flight
- Blue-grey colors allows camouflage in bodies of water
- Large beak to swallow food whole

American Beaver

Description: North America's largest rodent (2-3 ft long w/o tail), with brown fur and distinctive flat, scaly tail and webbed back feet; crepuscular (most active at sunrise and sunset) and shy

Diet: Primary Consumer—mostly the inner bark (cambium) of cottonwood, willow, and dogwood and other vegetation

Habitat: Near creeks, rivers, and wetlands in North America

How does it change its environment?

- Builds dams to create ponds/wetland habitats
- Fells trees, opening canopies
- Builds lodges (homes)

Adaptations

- Strong, ever-growing teeth for gnawing trees
- Waterproof fur
- Flat, scaly tail for swimming, patting down mud and communicating
- Webbed hind feet for swimming
- Eyes, nose and ears have extra membranes adapted for swimming so the beaver can plug its nose and ears and open its eyes underwater

Bald Eagle

Description: Large (6-7.5 ft wingspan) raptor with dark brown body and distinctive white (bald) head and neck (juveniles are entirely mottled brown for first 4 years); often seen perching high above in trees or soaring

Diet: Secondary to Tertiary Consumer—mostly fish, but also small mammals and other birds

Habitat: Near lakes and rivers in North America (resident in Willamette Valley but migratory in most other regions)

How does it change its environment?

- Builds large nests in tall trees

Adaptations

- Excellent eyesight—can spot a fish in a lake from hundreds of feet in the air
- Speed—can dive at speeds up to 100 mph
- Sharp talons and beak for grasping and tearing apart prey

Western Garter Snake

Description: Small (1-3 ft long) snake marked by colorful stripes down the body, usually yellow or orange; often found basking or hiding under logs

Diet: Secondary Consumer--small rodents, amphibians, reptiles, and insects

Habitat: Varied, including wetlands, mountains, grasslands, and woodlands; prefers to live near water source

Adaptations

- Can swim short distances to flee and hunt
- Mildly venomous, but cannot affect humans
- Has a wide-ranging diet depending on what's available and where it lives
- Basks in the sun to maintain body temperature
- Hibernates in knots of other snakes in existing burrows over winter to keep warm

Pacific Chorus (Tree) Frog

Description: Small (1-2 in. long) frog varying in color from bright green to light tan; often marked by a “mask” around eyes; begins life as an aquatic tadpole that develops legs and gills before transitioning to land

Diet: Secondary Consumer—insects, small mammals, frogs, salamanders, fish

Habitat: Near rivers, ponds, and wetlands in western North America

Adaptations

- Sticky toe pads allow them to cling to most surfaces
- Sticky, long tongue can catch prey from far away
- Can change the color of their skin from green to brown to camouflage seasonally (takes weeks to transition between colors)
- Long, strong legs allow them to jump great distances and heights
- Metamorphose from aquatic tadpoles to amphibians

Dragonfly

Description: Large (2-4 in. long) winged insect with long body, four extended wings and often very colorful; begins life as an aquatic nymph before emerging from exoskeleton

Diet: Secondary Consumer—insects, larvae, tadpoles

Habitat: Near shallow bodies of water throughout the world

Adaptations

- Nimble wings can hover and fly straight up and down; aeronautical engineers are studying dragonfly wings to build better aircraft
- Large eyes that cover most of their head and can see almost 360 degrees around
- Serrated teeth for cutting through tough exoskeletons and shells of their prey
- Metamorphose from aquatic invertebrate, which lives in water for up to two years

Black Cottonwood

Description: Tall (50-100 ft tall) deciduous tree with heart-shaped leaves and distinctive “cottony” seed pods in summer; often develops as a shrub along waterways when predated by beaver and deer

Habitat: Permanently or seasonally wet soil along rivers, lakes, and wetlands in the Pacific Northwest

How it changes its environment

- Provides multiple layers of habitat, from trunk, lower canopy, to upper canopy
- Provides food for animals who eat its leaves, seeds, shoots, and inner bark
- Provide shade and cover, and absorbs water preventing flooding
- Roots help control erosion
- Purifies air, stores carbon, provides oxygen

Adaptations

- Fluffy seed pods are easily dispersed by wind, water, and animals
- Symbiotic relationship with beaver and deer, who rely upon Cottonwood for food while the Cottonwood benefits by developing new shoots and spreading rhizomatically
- One of the few trees that thrive in annually flooded areas

Black Twinberry

Description: Bushy shrub that can grow to 2-3 feet tall, with distinctive pair of yellow trumpet flowers that develop into black berries emerging from bright red sepals

Habitat: Moist forests and seasonally flooded areas along rivers and wetlands in western North America

How it changes its environment

- Provides habitat for small birds and mammals
- Provides food for many animals who eat the plant's berries, flower pollen, leaves, and shoots
- Helps control erosion with roots

Adaptations

- Trumpet-shaped flowers ideally suited for hummingbird and butterfly pollination
- Tasty berries attract birds and mammals to help spread its seed

Slough Sedge

Description: Evergreen sedge growing 1-3 feet and aggressively spreads through rhizomes; fluffy seed pods flower throughout the summer

Habitat: In permanently or seasonally wet soil along rivers, lakes, and wetlands

How it changes its environment

- Controls erosion with thick, fibrous root system
- Provides habitat and breeding grounds for many small insects, birds, and amphibians
- Filters impurities from water through transpiration
- Shades soil/water underneath to keep cool and moist

Adaptations

- Spreads rhizomatically in addition to seed pods, allowing for quick and aggressive expansion over an area
- Hardy, fibrous root system can withstand regular flooding