Aquatic Species
Fact Cards

The *Aquatic Species Fact Cards* can be used to support the lessons in Units 1 and 2. They can also be used independently for students to learn more about these species and to encourage further research.

STUDENT ACTIVITY PAGE | Aquatic Species Fact Cards

blue-green algae

Kingdom Bacteria
Phylum Cyanobacteria

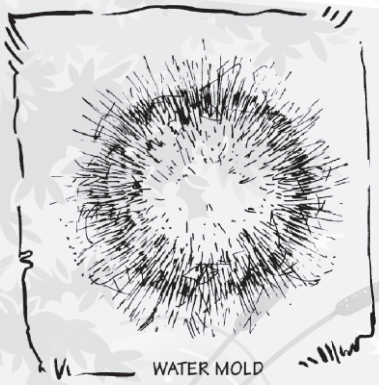
LOCATION - statewide - native

FEATURES - chlorophyll a; some have gas bubbles that allow them to float; may form filaments or clusters

HABITAT - any moist environment; tolerant of extreme conditions

HABITS - most are photosynthetic; carry out nitrogen fixation

water mold



Kingdom Chromalveolate
Phylum Heterokontophyta

LOCATION - statewide - native

FEATURES - saprophytic or parasitic; cellulose in cell walls; may cause disease in fishes and their eggs

HABITAT - some aquatic, some terrestrial

HABITS - often found on dead organisms in water; adds nutrients to surrounding area

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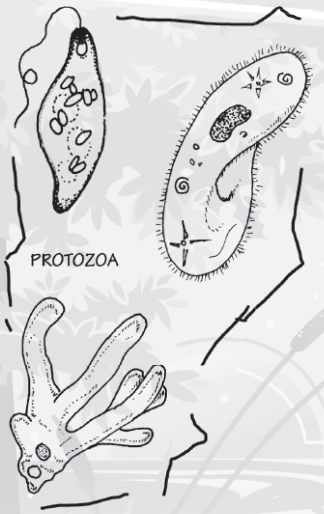
protozoa



Kingdom Protozoa

LOCATION statewide - native

FEATURES - lack chloroplasts and cell walls; unicellular; heterotrophs

HABITAT - aquatic or parasitic

HABITS - amoebas and relatives may secrete shells; some are covered with cilia; capture other organisms

sponge

Kingdom Animalia

Phylum Porifera

LOCATION - only where water is clear and free of debris - native

FEATURES - simple; multicellular; sessile

HABITAT - clear water

HABITS – filter-feeder, eating small organisms and particles in the water that passes through its body

hydra

Kingdom Animalia

Phylum Cnidaria

Class Hydrozoa

LOCATION - statewide - native

FEATURES - polyp is the typical life form; radial symmetry; nematocysts or "stinging cells" are found in the tentacles

HABITAT - bottom substrate of slow-moving water

HABITS - carnivore; eats small organisms trapped by its tentacles

leech

Kingdom Animalia

Phylum Annelida

Class Clitellata

LOCATION - statewide - native

FEATURES - sucker at each end of the body; segmented, flattened body; hermaphrodites

HABITAT - water or moist areas on land

HABITS - many are external parasites, feeding on the blood of fishes, turtles, amphibians, water birds and snails; others are predators or scavengers; can survive for months between meals

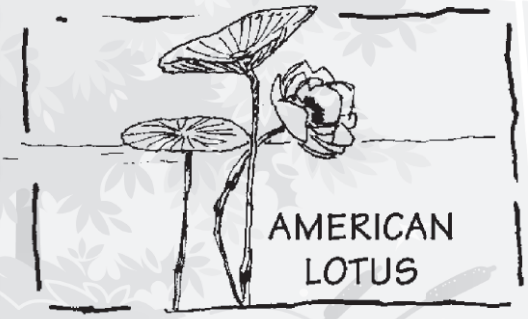
common cat-tail

Typha latifolia
Kingdom Plantae
Division Tracheophyta
LOCATION - statewide - native
FEATURES - smooth, upright, unbranched stems up to 12 feet tall; leaves elongated and pointed at tip; many flowers in a dense spike
HABITAT - marshes or other wet areas
HABITS - spreads by seeds or rhizomes; flowers June-September

pin oak

Quercus palustris
Kingdom Plantae
Division Tracheophyta
LOCATION - scattered throughout Illinois - native
FEATURES - may grow to 75 feet; lower branches droop; acorns 1-4 together
HABITAT - flood plain woods, along streams, edges of swamps and ponds
HABITS - flowers April-May with the male and female flowers on the same tree

water lotus



Nelumbo lutea
Kingdom Plantae
Division Tracheophyta
LOCATION - scattered throughout Illinois - native
FEATURES - round leaves up to 2½ feet across; large, solitary, pale yellow flowers
HABITAT - standing water, lakes, ponds, rivers
HABITS - flowers July-September; may form dense colonies

silver maple

Acer saccharinum
Kingdom Plantae
Division Tracheophyta
LOCATION - statewide - native
FEATURES - may reach 100 feet tall; bark gray or silver; leaves white on lower surface; winged seeds
HABITAT - bottomland woods
HABITS - flowers late February to early April

eastern cottonwood

Populus deltoides

Kingdom Plantae

Division Tracheophyta

LOCATION - statewide - native

FEATURES - may reach 100 feet tall; bark gray and furrowed at maturity; leaves triangular; male and female flowers on separate trees

HABITAT - bottomland woods

HABITS - flowers February-March; fruits are ellipsoid capsules in clusters

pitcher-plant

Sarracenia purpurea

Kingdom Plantae

Division Tracheophyta

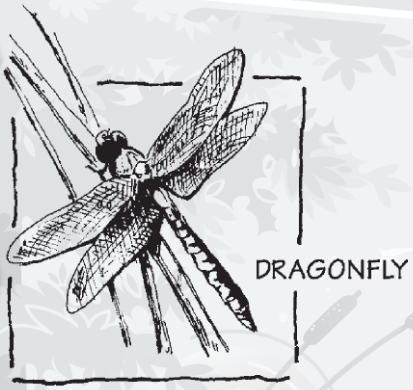
LOCATION - northeastern Illinois - native

FEATURES - tubular green leaves streaked with purple and red; leaf is a pitfall trap for insects

HABITAT - bogs and fens

HABITS - insects and other small organisms are attracted to the leaf where they may be trapped and digested

dragonfly



Kingdom Animalia

Phylum Arthropoda

Class Insecta

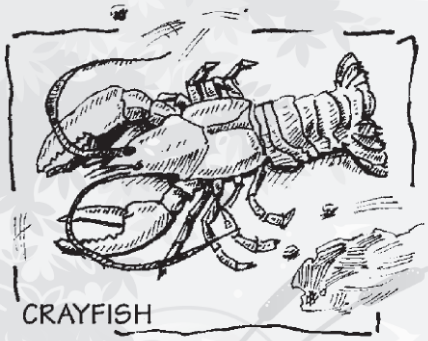
LOCATION - statewide - native

FEATURES - wings held outstretched at rest; chewing mouthparts; long abdomen

HABITAT - adults usually found near water (in which the nymphs live)

HABITS - adults feed on insects they catch while in flight; nymphs feed on aquatic insects

crayfish



Kingdom Animalia

Phylum Arthropoda

Class Malacostraca

LOCATION - statewide - native

FEATURES - 5 pairs of legs; large claw on each of the first pair of legs

HABITAT - in water or in burrows constructed below ground

HABITS - eats dead vegetation and small invertebrates

mosquito

Kingdom Animalia
Phylum Arthropoda
Class Insecta

LOCATION - statewide - native

FEATURES - one pair of membranous wings; sucking mouthparts; complete metamorphosis

HABITAT - adults wide-ranging; larvae in still or stagnant water

HABITS - larvae feed on organic debris; adult females feed on blood; adult males feed on nectar and plant juices

caddisfly

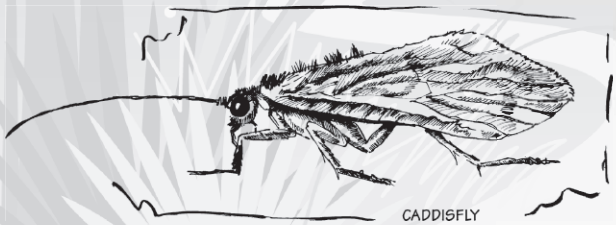
Kingdom Animalia
Phylum Arthropoda
Class Insecta

LOCATION - statewide - native

FEATURES - wings held rooflike over body while resting; slender, elongate, mothlike insect

HABITAT - larvae in ponds and streams; adults near water

HABITS - larvae build a portable case and eat plant material; adults feed on liquids and live about one month



mayfly

Kingdom Animalia
Phylum Arthropoda
Class Insecta

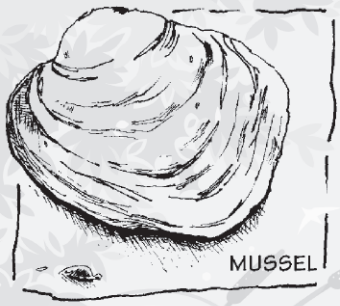
LOCATION - statewide - native

FEATURES - wings held above body at rest; soft-bodied; nymph has gills along abdomen and three tails

HABITAT - nymphs aquatic; adults near water

HABITS - nymphs eat algae and aquatic plants; adults live for 1-2 days and do not feed

mussel



Kingdom Animalia
Phylum Mollusca
Class Bivalvia

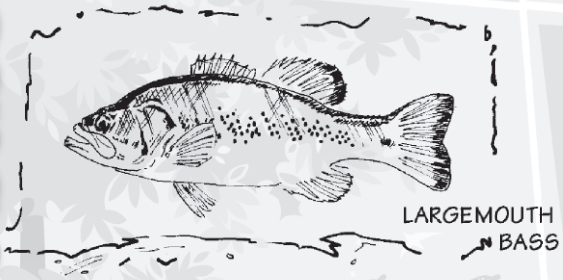
LOCATION - statewide - native

FEATURES - soft inner body and hard outer shell

HABITAT - streams and lakes

HABITS - feeds on plankton and detritus that it filters from water; may live for 100 years

largemouth bass



Micropterus salmoides

Kingdom Animalia
Phylum Chordata
Superclass Osteichthyes
Class Actinopterygii

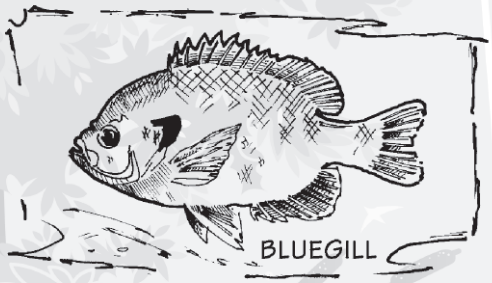
LOCATION - statewide - native

FEATURES - upper jaw extends beyond back of eye when mouth is closed; dark lateral stripe along length of body

HABITAT - lakes, ponds, sluggish rivers

HABITS - eats mainly fishes and crayfish; females may lay up to 100,000 eggs

bluegill



Lepomis macrochirus

Kingdom Animalia
Phylum Chordata
Superclass Osteichthyes
Class Actinopterygii

LOCATION - statewide - native

FEATURES - short, black gill flap with no margin; black spot at posterior end of dorsal fin

HABITAT - sluggish streams and impoundments

HABITS - eats insects and their larvae, crayfish, algae and fishes; females may lay up to 67,000 eggs

muskellunge

Esox masquinongy

Kingdom Animalia
Phylum Chordata
Superclass Osteichthyes
Class Actinopterygii

LOCATION - hatchery-stocked lakes - exotic

FEATURES - body elongated; head large with duckbill jaws and canine teeth

HABITAT - lakes

HABITS - eats fishes; female may lay up to 265,000 eggs

channel catfish

Ictalurus punctatus

Kingdom Animalia
Phylum Chordata
Superclass Osteichthyes
Class Actinopterygii

LOCATION - statewide - native

FEATURES - no scales; eight barbels; adipose fin; deeply forked tail; rounded anal fin; single hard spine in pectoral and dorsal fins

HABITAT - lakes, ponds, rivers

HABITS - eats plant and animal material; females may lay up to 70,000 eggs

shovelnose sturgeon

Scaphirhynchus platorynchus

Kingdom Animalia
Phylum Chordata
Superclass Osteichthyes
Class Actinopterygii

LOCATION - rivers - native

FEATURES - snout flattened and shovel-shaped; fringed barbels; upper lobe of tail fin with a long, slender filament

HABITAT - rivers

HABITS - eats insect larvae; females may lay as many as 200,000 eggs

blackstripe topminnow

Fundulus notatus

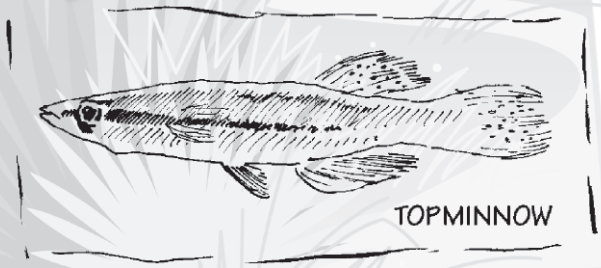
Kingdom Animalia
Phylum Chordata
Superclass Osteichthyes
Class Actinopterygii

LOCATION - statewide - native

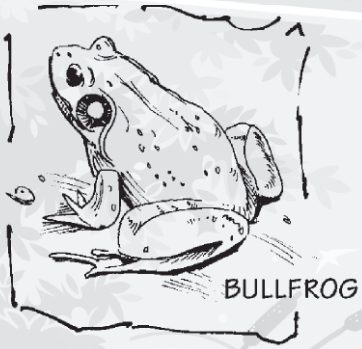
FEATURES - front of dorsal fin base situated above anal fin base; brown with a broad, black horizontal stripe

HABITAT - large lowland rivers and pools of streams

HABITS - eats insects, crustaceans and snails; female may lay up to 30 eggs at once



bullfrog



Lithobates catesbeianus

Kingdom Animalia
Phylum Chordata
Class Amphibia

LOCATION - statewide - native

FEATURES- 3½-6 inches; no dorsolateral folds; tympanum larger than eye; olive, green or brown dorsum; call is "jug-o-rum"

HABITAT- any type of permanent water

HABITS - solitary animal; eats most anything it can swallow

mudpuppy

Necturus maculosus

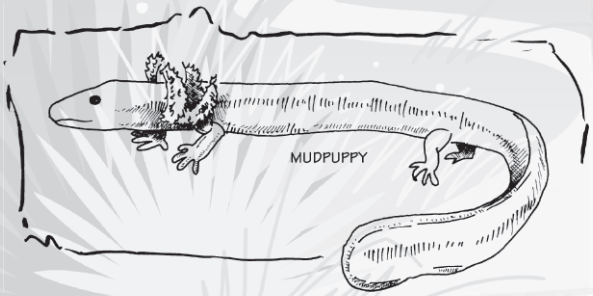
Kingdom Animalia
Phylum Chordata
Class Amphibia

LOCATION - statewide - native

FEATURES - 8-13 inches; aquatic; four toes per foot; permanent bushy gills; slimy

HABITAT - lakes, lagoons, rivers, large creeks

HABITS - eats fishes, arthropods, annelids and mollusks



northern water snake

Nerodia sipedon

Kingdom Animalia
Phylum Chordata
Class Reptilia

LOCATION – northern ½ of the state - native

FEATURES - 24-42 inches; keeled scales; heavy-bodied; venter with numerous semilunar brown or red markings

HABITAT - streams, lakes, ponds

HABITS - active day and night; eats fishes and amphibians

spotted salamander

Ambystoma maculatum

Kingdom Animalia
Phylum Chordata
Class Amphibia

LOCATION - extreme northeastern and northwestern Illinois, the eastern border and the southern ⅓ of the state - native

FEATURES - 6-7¾ inches; blue-black, slate or brownish colored with two rows of yellow-white or orange-yellow spots from head onto tail

HABITAT - high quality forested areas with permanent or temporary ponds

HABITS - active at night; eats arthropods, mollusks and annelids

spiny softshell turtle

Apalone spinifera

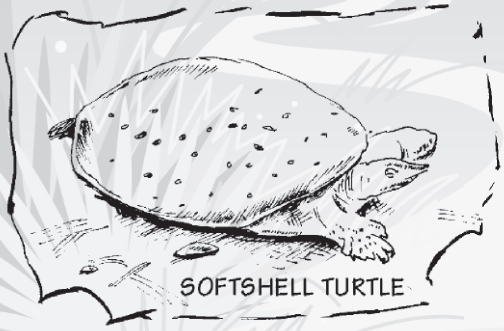
Kingdom Animalia
Phylum Chordata
Class Reptilia

LOCATION - statewide - native

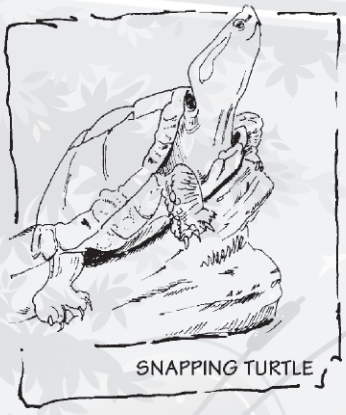
FEATURES - 5-17 inches; pointed nose; leathery shell; anterior edge of carapace with bumps

HABITAT - lakes, sloughs, rivers, streams

HABITS - may bask on sandbar or bury itself in sand at stream's edge; eats crustaceans, fishes, amphibians, insects and mollusks



snapping turtle



Chelydra serpentina

Kingdom Animalia
Phylum Chordata
Class Reptilia

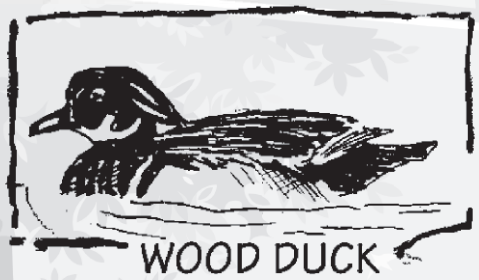
LOCATION - statewide - native

FEATURES - 8-12 inches; 10-35 pounds; strong jaws; enormous head, thick legs

HABITAT - all types of water bodies

HABITS - spends much time on the bottom waiting for prey; eats most anything

wood duck



Aix sponsa
Kingdom Animalia
Phylum Chordata
Class Aves

LOCATION - common migrant and summer resident statewide - native

FEATURES - male is highly colored, female is brown; long, square dark tail

HABITAT - wooded swamps, rivers, ponds

HABITS - perches in trees; eats acorns, seeds and corn in fall and insects in summer

red-winged blackbird

Agelaius phoeniceus
Kingdom Animalia
Phylum Chordata
Class Aves

LOCATION - migrant and summer resident statewide; winter resident in southern Illinois - native

FEATURES - male has bright red shoulder patches; female is brown streaked; song is "konk-ka-reee"

HABITAT - cultivated fields, drainage ditches, marshes, wood edges

HABITS - eats insects, seeds and waste grain; forms huge roosts in winter

belted kingfisher

Megaceryle alcyon
Kingdom Animalia
Phylum Chordata
Class Aves

LOCATION - common migrant statewide; uncommon summer resident - native

FEATURES - blue and white coloration; harsh, rattling call

HABITAT - around ponds, lakes, rivers, streams

HABITS - catches small fishes by diving; burrows into banks to lay eggs

great blue heron

Ardea herodias
Kingdom Animalia
Phylum Chordata
Class Aves

LOCATION - statewide migrant and summer resident - native

FEATURES - 42-52 inches; blue-gray color; long legs, long neck, daggerlike bill

HABITAT - major rivers, marshes, lakes, ponds

HABITS - usually nests in colonies; eats fishes, crayfish, frogs and other aquatic creatures

bank swallow

Riparia riparia
Kingdom Animalia
Phylum Chordata
Class Aves

LOCATION - common migrant and summer resident statewide - native

FEATURES - brown back; brown neck band; call is a dry, weak rattle

HABITAT - open areas, over fields, along rivers and over lakes and ponds

HABITS - needs banks associated with waterways, roadways or mounds of sand for nest sites; nests in colonies; eats insects

osprey

Pandion haliaetus
Kingdom Animalia
Phylum Chordata
Class Aves

LOCATION - statewide migrant - native

FEATURES - shows a crook in wings while flying; broad, black cheek patch

HABITAT - lakes, but may be found at rivers and ponds

HABITS - eats fishes that it catches with its feet

raccoon

Procyon lotor
Kingdom Animalia
Phylum Chordata
Class Mammalia

LOCATION - statewide - native

FEATURES - long tail banded with light and dark rings; black facial mask

HABITAT - any as long as a permanent water supply, den sites and food are available

HABITS - climbs and swims well; eats a variety of plant and animal matter

American mink

Mustela vison
Kingdom Animalia
Phylum Chordata
Class Mammalia

LOCATION - statewide - native

FEATURES – red-brown back; dark tip on tail; toes webbed

HABITAT - where permanent water supply is available

HABITS - nocturnal; good swimmer; eats muskrats, fishes, voles, mice, rabbits, crayfish, birds, reptiles, amphibians and insects

North American river otter

Lontra canadensis

Kingdom Animalia

Phylum Chordata

Class Mammalia

LOCATION - statewide - native

FEATURES - webbed toes; thick, short, brown fur; can close ears

HABITAT - streams, rivers, lakes, ponds, wetlands, drainage ditches, backwater areas

HABITS - active day or night; eats fishes, frogs and crayfishes; excellent swimmer

American beaver

Castor canadensis

Kingdom Animalia

Phylum Chordata

Class Mammalia

LOCATION - statewide - native

FEATURES - broad, flattened paddlelike tail; webbed hind feet; lips close behind front teeth

HABITAT - streams, rivers, ponds, lakes, drainage ditches, backwater areas

HABITS - eats bark of shrubs and trees, grasses, corn and aquatic plants; nocturnal

muskrat

Ondatra zibethicus

Kingdom Animalia

Phylum Chordata

Class Mammalia

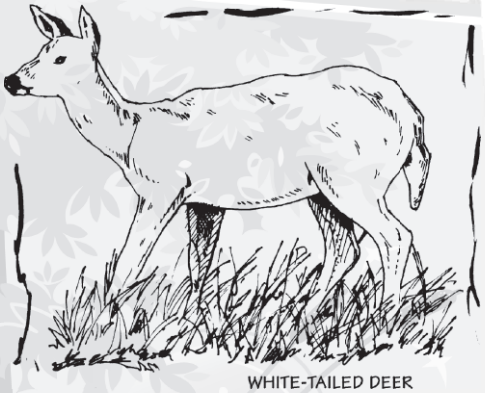
LOCATION - statewide - native

FEATURES - tail elongated and nearly hairless; hind feet elongate and partly webbed

HABITAT - ponds, lakes, streams, drainage ditches, swamps

HABITS - nocturnal; eats cat-tails and other aquatic plants; may build houses of vegetation or burrow in banks

white-tailed deer



Odocoileus virginianus

Kingdom Animalia

Phylum Chordata

Class Mammalia

LOCATION - statewide - native

FEATURES - antlers on males; conspicuous white underside of tail

HABITAT - wooded areas along streams and swamps

HABITS - active at night and at dusk; eats waste grain, acorns and leaves and shoots of some trees