

eol species cards



Bioblitz
Common Animal Groups

eol species cards

These 16 animal cards provide an introduction to common groups (class and phylum) of organisms and provide fun facts and vocabulary. Use the cards to learn about the kinds of organisms that might be found in a BioBlitz or species inventory.

Learn how to use these cards for designing a BioBlitz experience: nationalgeographic.org/activity/designing-bioblitz-learning-experience

Find this card deck and more at: education.eol.org/species_cards

Title Image Credit:
Rob Kleine CC-BY-NC

Project Description

Common Name	Scientific Name	Taxon Group
Food Web Roles		
DECO	Decomposer: Energy from dead material	
AUTO	Autotroph: Energy from sun, water, CO ₂	
HERB	Herbivore: Energy from plants	
OMNI	Omnivore: Energy from plants, animals	
CARN	Carnivore: Energy from animals	
APEX	Apex Predator: Top predator	
DETR	Detritivore: Energy from dead vegetation	
SANG	Sanguinivore: Energy from blood	
MULT	Multiple: Energy from multiple sources	
Habitat (where species is found) + (indicates species is also found in other habitats)		
Species Conservation Status		
IUCN Redlist™		
International Union for Conservation of Nature		
NE	Not Evaluated	
VU	Vulnerable	
CR	Critically Endangered	
EW	Extinct in Wild	
EN	Endangered	
EX	Extinct	

Amphibians
Class Amphibia

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Vertebrates



Terrestrial and Aquatic
+ Foodweb Role

CARN

Body Structure
Heat Source
Body Covering
Respiration
Reproduction

Internal Skeleton
Ectothermic
Permeable skin
Gills, lungs
Lays eggs

NE
IUCN Redlist™

Fun Facts
Most amphibians like frogs and salamanders live as tadpoles in water, and as adults on land.
There are over 6,500 named amphibian species!

Image: Brian Gratwicke CC-BY

Arachnids
Class Arachnida

eol
Arthropods



Terrestrial and Aquatic
+ Foodweb Role

CARN

Body Structure
Heat Source
Body Covering
Body Parts
Number of Legs

Invertebrate
Ectothermic
Exoskeleton
2
8

NE
IUCN Redlist™

Fun Facts
Arachnids (spiders, scorpions, mites) range from 1mm, the size of a pinhead, to 25 cm (10 inches) long.
There are over 102,000 named arachnid species!

Image: Biopix CC-BY-NC

Birds
Class Aves

eol
Vertebrates



Terrestrial and Aquatic
+ Foodweb Role

MULTI

Body Structure
Heat Source
Body Covering
Respiration
Reproduction

Internal Skeleton
Endothermic
Feathers
Lungs
Lay eggs

NE
IUCN Redlist™

Fun Facts
The Arctic Tern (*Sterna paradisaea*) migrates up to 25,000 miles/year round trip from the Arctic to Antarctica.
There are nearly 10,000 named bird species!

Image: BJ Stacey CC-BY-NC



Centipedes

Class Chilopoda

eol
Arthropods



+ Terrestrial

MULTI

Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Exoskeleton
Body Parts	Many segments
Number of Legs	15-175 pairs



Fun Facts

The Amazonian giant centipede (*Scolopendra gigantea*) grows to 12 in. long and eats lizards, frogs, mice, + bats. There are over 3,000 named species of centipedes!

Image: Biopix CC-BY-NC

Octopi, Squid, Cuttlefish

Class Cephalopoda

eol
Molluscs



+ Marine

CARN

Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Muscular skin
Body Parts	Head, foot, sac
Number of Arms	8-10



Fun Facts

Chambered nautiluses are the only living cephalopods with shells. All others have a mantle (internal shell). There are about 700 named species of cephalopods!

Image: Beckmannjan CC-BY-SA

Jellyfish, Anemones, Corals

Phylum Cnidaria

eol
Cnidarians



+ Aquatic

MULTI

Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	None
Body Parts	Mouth, body cavity
Body Symmetry	Bilateral or radial



Fun Facts

Jellies, anemones, and corals use small barbed threads called nematocysts to capture prey and sting predators. There are about 9,800 named species of cnidaria!

Image: Miloslav Petryl CC-BY-NC

Crustaceans

Subphylum Crustacea

eol
Arthropods



+ Terrestrial and Aquatic

MULTI

Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Exoskeleton
Body Parts	2 or 3
Number of Legs	Most have 8-12



Fun Facts

Crustaceans include crabs, lobsters, shrimp, barnacles. It is estimated that lobsters can live over 100 years. There are nearly 47,000 species of crustaceans!

Image: jere7my tho?rpe CC-BY-NC-SA

Sea stars, urchins

Phylum Echinodermata

eol
Echinoderms



+ Marine

MULTI

Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Spiny skin
Body Parts	Mouth, stomach, feet
Body Symmetry	Radial



Fun Facts

Many echinoderms extrude a stomach from their bodies to engulf prey and secrete an enzyme to digest. There are about 7,000 named species of echinoderms!

Image: steven van tendeloo CC-BY-SA

Insects

Class Insecta

eol
Arthropods



+ Terrestrial and Aquatic

MULTI

Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Exoskeleton
Body Parts	3
Number of Legs	6



Fun Facts

The midge *Beligica antarctica* is the only insect species that lives on Antarctica. There are over 1 million named insect species!

Image: Jon Sullivan (PD-PDphoto.org)



Mammals

Class Mammalia

eol
Vertebrates



+ Terrestrial and Aquatic

MULTI
Foodweb Role

Body Structure	Internal Skeleton
Heat Source	Endothermic
Body Covering	Fur
Respiration	Lungs
Reproduction	Live birth

NE
IUCN Redlist™

Fun Facts

The smallest mammal, Etruscan shrew, is about 1 inch long, and the largest, the blue whale, is over 100 ft long! There are about 5,500 named species of mammals!

Image: Erik Jørgensen CC-BY-NC-SA

Millipedes

Class Diplopoda

eol
Arthropods



+ Terrestrial

DETR
Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Exoskeleton
Body Parts	Many segments
Number of Legs	80-400

NE
IUCN Redlist™

Fun Facts

To protect from predators, millipedes curl up in a ball and release a foul-smelling odor. There are about 12,000 named species of millipedes!

Image: Biopix CC-BY-NC

Mussels And Clams

Class Bivalvia

eol
Molluscs



+ Aquatic

MULTI
Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Shell
Body Parts	Foot, mantle, cavity
Number of Arms	None

NE
IUCN Redlist™

Fun Facts

Scallops use a siphon in their body cavity to propel themselves through the water. There are about 15,000 named species of bivalves!

Image: WoRMS for SMEBD CC-BY-NC-SA

Ray-finned Fishes

Class Actinopterygii

eol
Vertebrates



+ Aquatic

MULTI
Foodweb Role

Body Structure	Internal Skeleton
Heat Source	Ectothermic
Body Covering	Scales, fins
Respiration	Gills
Reproduction	Lay eggs

NE
IUCN Redlist™

Fun Fact

The fastest fish species, sailfish, can swim up to 70 miles per hour.

There are over 31,000 species of fish!

Image: Robertson, D Ross CC-BY-NC

Reptiles

Class Reptilia

eol
Vertebrates



+ Terrestrial and Aquatic

MULTI
Foodweb Role

Body Structure	Internal Skeleton
Heat Source	Ectothermic
Body Covering	Scales
Respiration	Lungs
Reproduction	Lay eggs (most)

EN
IUCN Redlist™

Fun Facts

Some snakes such as constrictors carry eggs internally and give birth to live young.

There are over 8,700 species of reptiles!

Image: Baudilio Rebollo Fernández CC-BY-NC-SA

Segmented Worms

Phylum Annelida

eol
Annelids



+ Terrestrial and Aquatic

DETR
Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Soft cuticle
Body Parts	Many segments
Number of legs	None

NE
IUCN Redlist™

Fun Facts

Most annelids have hair-like structures called setae to aid in movement in soil.

There are over 16,700 species of segmented worms!

Image: Belteguise CC-BY-NC-SA



Snails And Slugs

Class Gastropoda



eol
Molluscs

MULTI
Terrestrial and Aquatic
Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Shell (some)
Body Parts	Head, foot
Number of Arms	None

IUCN Redlist™ NE

Fun Facts
Many snails have an operculum, a hard structure at the base of the foot for protection and sometimes mobility. There are about 60,000 named species of gastropods!
Image: John Slapcinsky CC-BY-NC

Sponges

Phylum Porifera



eol
Sponges

DET R
Aquatic
Foodweb Role

Body Structure	Invertebrate
Heat Source	Ectothermic
Body Covering	Soft, porous matrix
Body Parts	Pores, water canals
Body Symmetry	Radial, asymmetrical

IUCN Redlist™ NE

Fun Facts
Sponges are the simplest animals, without tissues. Their bodies are organized to filter nutrients from water. There are about 6,000 named species of sponges!
Image: WoRMS for SMEBD CC-BY-NC-SA

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Adaptation: A physical characteristic or behavior that helps an organism survive in its environment

Brood/Litter: Group of young produced at one time

Carapace: Shell of a turtle or head and thorax of arthropods

Clutch Size: Number of eggs laid in a nest at one time

Complete Metamorphosis: Some insects have a four stage life cycle: egg, larva, pupa, adult

Crepuscular: Active at dawn and dusk

Diurnal: Active during the day

Vocabulary

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Habitat: The area an organism lives and can find its resources

Growth Form: Classification of plants as trees, shrubs, herbaceous, and grasses

Incomplete Metamorphosis: Some insects have a three stage life cycle: eggs, nymph, adult

Molt: The act of shedding exoskeleton, skin or feathers as an animal grows

Snout-vent Length: In amphibians and reptiles, the length from tip of nose to tail base (cloaca)

Standard Length: In fishes, length from tip of snout to end of last vertebra

Vocabulary

