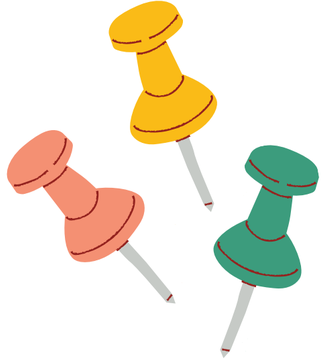
ANIMAL HABITATS



I AM ABLE TO...

- INVESTIGATE EXAMPLES OF DIFFERENT HABITATS AROUND THE WORLD AND THE SPECIES THEY CAN PROVIDE FOR
- IDENTIFY THE DEFINITIONS OF AND DIFFERENCE BETWEEN HERBIVORES, CARNIVORES, AND OMNIVORES USING EXAMPLES OF INTERACTING SPECIES
- USE IMAGES, DESCRIPTIONS, AND VIDEOS TO BUILD OUR RESEARCH OF HABITATS AND THE ANIMAL DIETS THEY CAN SUPPORT
- CLASSIFY ANIMALS ACCORDING TO THEIR DIETS, AS OMNIVORES, CARNIVORES, OR HERBIVORES
- CREATE A REPRESENTATION OF A HABITAT THAT INCLUDES A DESCRIPTION, NECESSITIES, AND AT LEAST THREE ANIMAL SPECIES THAT ARE CLASSIFIED ACCORDING TO DIET

WHAT IS A HABITAT?

A HABITAT IS THE PLACE WHERE AN ORGANISM (PLANT OR ANIMAL) LIVES. A HABITAT PROVIDES AN ORGANISM WITH THE FOOD, WATER, SHELTER, AND SPACE THAT IT NEEDS TO SURVIVE.

HERBIVORE

HERBIVORES ARE ANIMALS THAT EAT ONLY PLANTS.

CARNIVORE

CARNIVORES ARE ANIMALS WHO ONLY EAT OTHER ANIMALS.

OMNIVORE

OMNIVORES ARE ANIMALS WHO HAVE A DIET OF BOTH PLANTS AND MEAT.

FOREST HABITAT

FOREST HABITATS ARE THE HOMES OF HERBIVORES LIKE RABBITS, DEER, AND MICE; CARNIVORES LIKE LYNX, EAGLES, AND FERRETS; AND OMNIVORES LIKE BLACK BEARS, SKUNKS, AND FOXES.

OCEAN HABITAT

OCEAN HABITATS ARE HOME TO HERBIVORES LIKE GREEN SEA TURTLES, PARROTFISH, AND SEA URCHIN; CARNIVORES LIKE SHARKS, SEA LIONS AND ORCAS; AND OMNIVORES LIKE CRABS, BONNETHEAD SHARKS, AND MANATEES.

DESERT HABITAT

DESERT HABITATS PROVIDE FOR HERBIVORES LIKE DESERT TORTOISES, QUAIL, AND CAMELS; CARNIVORES LIKE THE STRIPED HYENA, DESERT FOXES, AND RATTLESNAKES; AND OMNIVORES LIKE RAVENS, COYOTES, AND NOCTURNAL LIZARDS.

RAINFOREST HABITAT

RAINFOREST HABITATS ARE HOME TO HERBIVORES LIKE SLOTHS, RATS, AND HOWLER MONKEYS; CARNIVORES LIKE JAGUAR, ANACONDAS, AND HARPY EAGLES; AND OMNIVORES LIKE BATS, CHIMPANZEES, AND DIFFERENT SPECIES OF PIGS.

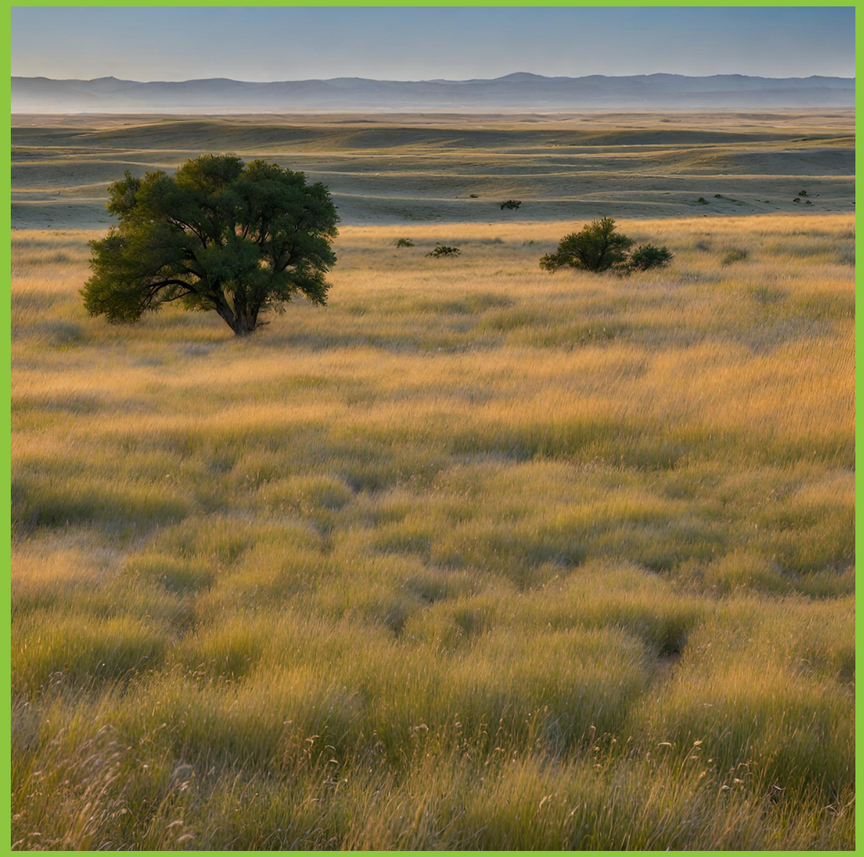
ARCTIC HABITAT

ARCTIC HABITATS HOUSE HERBIVORES LIKE REINDEER AND ELK, MUSKOX, AND LEMMINGS; CARNIVORES LIKE SNOWY OWLS, ARCTIC WOLVES, AND WOLVERINES; AND OMNIVORES LIKE POLAR BEARS, ARCTIC HARES, AND RAVENS.

WETLANDS HABITAT

WETLANDS ARE HOME TO HERBIVORES LIKE MOOSE, BEAVERS, AND DUCKS; CARNIVORES LIKE SNAPPING TURTLES, HAWKS, AND ALLIGATORS; AND OMNIVORES LIKE PAINTED TURTLES, WORMS, AND CRAYFISH.

GRASSLANDS HABITAT



GRASSLAND HABITATS PROVIDE SUPPORT TO HERBIVORES LIKE BISON, ANTELOPES, AND RHINOCEROSES; CARNIVORES LIKE CHEETAHS, LIONS, AND RED-TAILED HAWKS; AND OMNIVORES LIKE PRAIRIE DOGS, EMU, AND COYOTE.

UNITED NATIONS SUSTAINABILITY GOALS

- Build bee hotels or bird feeders.
- Participate in citizen science such as Ontario Amphibian Atlas and ProjectFeederWatch
- Encourage bird & insect diversity by introducing different flower shapes and sizes throughout your school garden. Where possible use locally sourced native plants from indigenous seed stock.

GOAL #15: LIFE ON LAND. THIS MEANS EVERYONE SHOULD HELP PROTECT EARTH'S ECOSYSTEM. AN ECOSYSTEM IS AN AREA WHERE PLANTS AND ANIMALS INTERACT WITH NON-LIVING THINGS LIKE SOIL OR WATER.

MINECRAFT EDUCATION

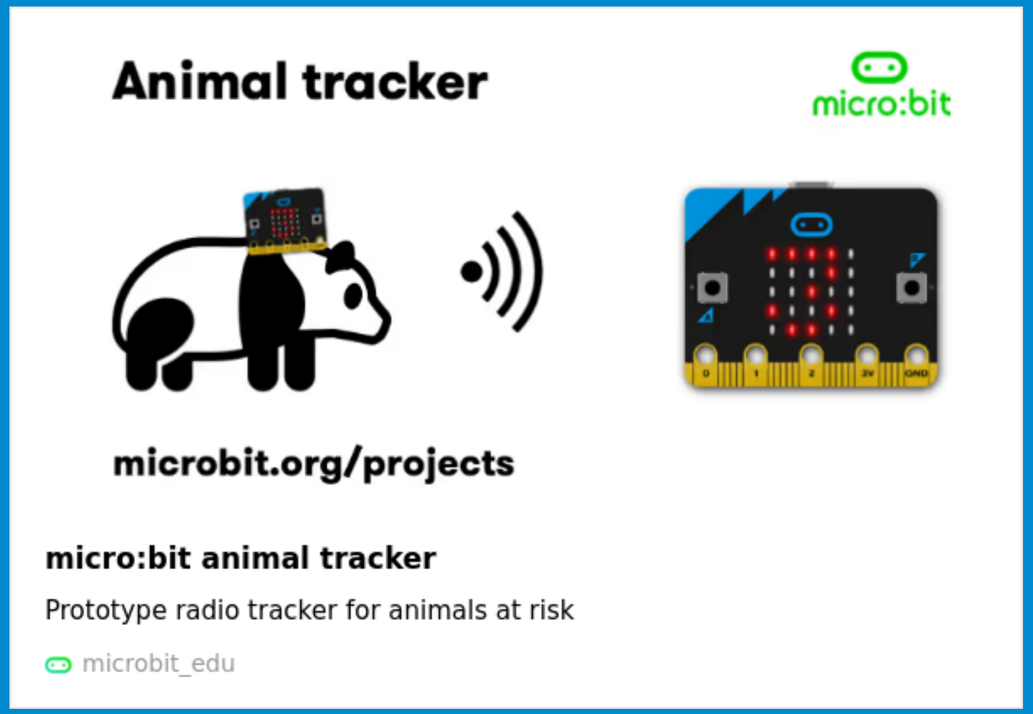
STUDENTS EXAMINE THE IMPACT MODERN CIVILIZATION HAS ON THE ENVIRONMENT AND DESIGN A BIOME THAT HARMONIZES THE BALANCE BETWEEN HUMANS AND NATURE.

Lessons

minecraft.net

MICRO:BIT CHALLENGE

USE THE MICRO:BIT'S ACCELEROMETER AND RADIO FEATURES TO MAKE A PROTOTYPE OF A DEVICE TO HELP SCIENTISTS TRACK POLAR BEARS OR OTHER ANIMALS AND DISCOVER HOW THEY ARE BEING AFFECTED BY CLIMATE CHANGE.



CHALLENGE

AS A CLASS, DESIGN THE ANIMAL HABITATS FOR AN ENTIRE ZOO.

EACH PERSON/PAIR/GROUP WILL BE RESPONSIBLE FOR THE DETAILED DESIGN OF ONE ANIMAL HABITAT.

DESIGN THINKING

PLAN

CREATE

IMPROVE

- WHAT DO THE ANIMALS NEED AND WANT IN A HABITAT?
- WHAT DO THE ZOOKEEPERS WANT IN A HABITAT?
- WHAT DO THE ZOO VISITORS WANT IN A HABITAT?
- HOW DOES THE THIS DESIGN MEET THE NEEDS OF ALL STAKEHOLDERS?

SCHOOLYARD HABITAT SURVEY

STUDENTS INVENTORY THE HABITATS IN A DEFINED REGION USING A DATA SHEET. THEY THEN GRAPH THE HABITATS AND THE KINDS OF ORGANISMS FOUND. DATA ON HABITATS IMPACTED BY STUDENTS OR OTHER HUMAN ACTIVITY MIGHT ALSO BE GATHERED. STUDENTS GRAPH DATA SO THAT THE TYPE OF HABITAT IS RELATED TO THE NUMBER OF KINDS OF ORGANISMS OBSERVED. QUESTIONS ARE THEN ASKED ABOUT THESE DIFFERENCES AND POSSIBLE ANSWERS ARE BRAINSTORMED