



Irish Seed Savers Association

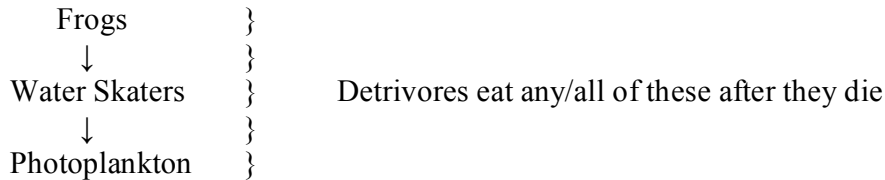
www.irishseedsavers.ie

POND-LIFE FACT SHEET

- Natural surface water on earth includes lakes, ponds, streams, rivers, estuaries, seas and oceans.
- A **pond** is a small body of fresh water shallow enough for sunlight to reach the bottom, for rooted plants to grow in and for microscopic and macroscopic organisms to thrive in.
- A pond is a habitat or a home for many different kinds of animals and plants.
- A **habitat** is an ecological area that is inhabited by a particular animal or plant species and must provide the following for the animals that live in it: food, water, shelter and space.
- An **ecosystem** is a community of plants, animals and smaller organisms that live, feed, reproduce and interact in the same area or environment.
- While a pond contains many different types of living organisms (plants and animals) it also contains **non-living components** such as water, oxygen, carbon dioxide, sediments, minerals, and nutrients.
- The amount of sunlight that a pond receives each day, the water temperature and levels of pollution affect the health of a pond and the plants and animals that live in it.
- **Organisms** (living things) that live in a pond habitat include: bacteria, phytoplankton, zooplankton, plants, insects, crustaceans, leeches, worms, frogs, fish and birds.
- **Phytoplankton** are microscopic free-floating plants.
- **Zooplankton** are microscopic free-floating animals.

The Food Chain in a Pond

A **food chain** describes who eats what in a habitat. It is usually listed as a **hierarchy**: the organisms (animals and plants) at the 'top' of the food chain do *not* get eaten but *do* eat the organisms that are beneath them on the chain. These organisms, in turn, eat the organisms beneath *them* on the chain and so on.



Types of Organisms Found in a Pond

- **Omnivores** are animals that eat both plants and animals
- **Herbivores** are animals that eat plants
- **Detrivores** are organisms that eat dead plants and animals
- **Carnivores** are animals that eat animals.
- **Primary producers** are plants that produce their own food/energy through the process of photosynthesis
- **Primary consumers** are predatory animals that eat other animals
- **Decomposers** are detrivores which break down or eat organic matter.
- **Invertebrates** are animals without a backbone
- **Aquatic invertebrates** are animals such as insects, crustaceans and worms.

Examples of specific animals and insects that live on the surface or in a pond include:

- Greater Water Boatman
- Pond skater
- Pond snail
- Whirligig beetle
- Water vole
- Frogs
- Newts
- Dragonfly
- Mayfly

The Layers of a Pond

- **Open water**: this is the surface centre of the pond. Microscopic plants, algae, small animals, floating plants, and insects can be found here.
- **Bottom of the pond**: some animals live on the mud and under the mud, for example flatworms and rat-tailed maggots can be found here.
- **The shallow part of the pond**: this is along the edges. You will find plant roots, frogs, and other small animals looking for food here. These plants also provide shelter for animals.



Irish Seed Savers Association

www.irishseedsavers.ie



THE COMMON FROG

FACT SHEET

- Frogs are Amphibians which means that they can move, feed and breathe equally well on land and in fresh water.
- Frogs are cold-blooded which means their body temperature changes with the temperature of their surroundings.
- We have three types of Amphibians in Ireland:
 - The Common Frog
 - The Natterjack Toad
 - The Smooth Newt
- Frogs can adapt their colour to suit their surroundings.
- Frogs can breathe through their skin as well as their lungs, which allows them to hibernate under water as well as on land.
- A frog's natural habitat is a pond when they are young and a wetland when they are fully grown.
- Frogs may travel up to 1km to find the same pond every year to breed in.
- Frogs hibernate through the winter months.
- Frogs mate at the beginning of spring.
- The male frog makes a croaking sound to attract the female frog.
- The eggs of the frog are called frogspawn and when these eggs hatch the babies are called tadpoles.

- Tadpoles are herbivores until about June, after which they switch to a carnivore diet for the rest of their lives.
- A herbivore is a creature that eats only plants.
- An omnivore eats both plants and meat.
- A carnivore eats only meat.
- It takes three years for a frog to mature and return to its original birth pond to begin breeding.
- A frog's outer skin is shed several times a year.
- A frog will swallow its prey whole as it does not have teeth.
- Frogs are useful in a wildlife or natural garden as they help to control the snail and slug populations, which is good news for young seedlings. This means you do not need to use chemicals to deter pests in your garden.
- The best way to encourage frogs into your garden is to build a natural wildlife pond and seed this with frogspawn. Keep some of your grass long so that when the frogs mature there is long grass for them to hide in and protect their skin from the sun.



www.irishseedsavers.ie

THE COMMON FROG WORKSHEET

1. What kind of creature is a frog?
 - a) Mammal
 - b) Amphibian
 - c) Vegetable.

2. What is an amphibian?
 - a) An animal that doesn't breathe, feed, or move
 - b) An animal that can move, feed, and breathe on land and in water
 - c) An animal that that can only move, feed and breathe on land.

3. Name our Irish frog:
 - a) Uncommon Frog
 - b) Common Frog
 - c) Rarely-Spotted Frog.

4. What does cold-blooded mean?
 - a) The body temperature continuously stays the same
 - b) The body temperature changes with the temperature of its surroundings
 - c) There is no body temperature.

5. Which is the natural habitat of a frog?
 - a) Trees
 - b) Ponds and Wetlands
 - c) A House.

6. What do you call frogs' eggs when they hatch?
- a) Chicks
 - b) Frogs
 - c) Tadpoles.
7. Frogs are:
- a) Herbivores
 - b) Omnivores
 - c) Carnivores .
8. What do frogs do in the winter months?
- a) Die
 - b) Hibernate
 - c) Go on holiday.
9. Why are frogs useful in a wildlife garden?
- a) They help eat the grass
 - b) They help improve the soil
 - c) They help control the slug and snail population by eating them.
10. How can you encourage frogs into your garden?
- a) Invite them
 - b) Build a wildlife pond and seed it with frogspawn
 - c) Use lots of chemicals and keep the grass very short.

