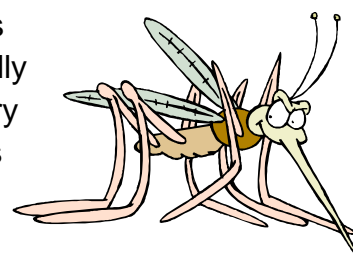
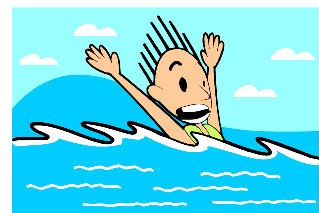


Waterways Safety Tips for Schools

PHYSICAL SAFETY

When children are gathered around a pond or stream it is important to follow these safety tips and precautionary measures:

- **Slipping hazards** – do not allow children to stand around the edge of ponds or streams particularly those with **steep banks**
- **Mud** – although water may look shallow at the edges, the mud can be very sticky and easily suck a wellington boot off a child's foot or unbalance a child resulting in a fall.
- **Stagnant water** – still water that has stood for a long time can become stagnant and attract mosquitoes. It can also harbour **bacteria**.
- **Bites, cuts, stings grazes** – water attracts biting insects such as **mosquitoes** and **ticks** (although only the female mosquito actually bites). Ensure that children and their parents know they should try and cover as much of their body as possible. Ensure that sleeves are buttoned or fit snugly at the wrist, that collars are turned up (against the sun and to help prevent bites), that trousers are tucked into socks, boots or wellies and that rubber or waterproof gloves are worn. A hat should be worn. Existing cuts or grazes should be kept covered with a waterproof plaster at all times. **Wash hands thoroughly after dealing with water and before eating.**



DEALING WITH TICKS & WATER BORNE DISEASES

Weil's Disease is caused by open wounds coming into contact with stagnant water (particularly at a water's margin) that has been contaminated with **rat's** urine.

Ticks are present in wooded or grassy areas, such as heaths and woodland and can cause disease such as **Lyme Disease**. It is easier to see ticks on light coloured clothing. If a tick is discovered it should be removed immediately using tweezers



(see <http://www.lymediseaseaction.org.uk/about-ticks/tick-removal/> for help on removing ticks).

POISONOUS PLANTS

Always wear gloves when handling any plant. Do not eat any part of a plant. Some poisonous or irritant plants that can be found by water are listed below:

- Cowbane
- Hemlock Water Dropwort
- Hemlock
- Giant hogweed –phototoxicity – reacts with light to cause severe irritation and blistering of the skin
- Woody nightshade (Bittersweet)



Cowbane

For more information and pictures of poisonous plants visit:

<https://www.rhs.org.uk/advice/profile?pid=524>

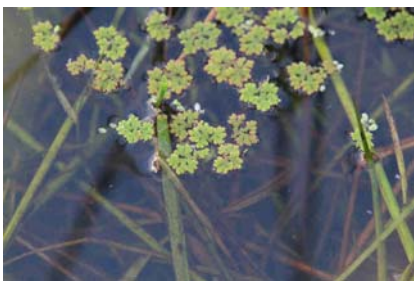
INVASIVE PLANTS AND THE LAW

There are many invasive non-native plants growing in or besides rivers and ponds. Some of these plants are highly invasive and seeds can be transferred to other locations via people, equipment and animals. Some of these plants are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) making it an offence to grow or cause to grow in the wild. Himalayan balsam has become problematic along river banks as it out competes other species resulting in a lack of biodiversity. Himalayan balsam reproduces via exploding capsules which can float down river and colonise other areas. Some invasive species, such as New Zealand Pygmy weed, can spread via tiny fragments.

On, in or emergent plants

Some species you may come across are shown below:

- Azolla filiculoides – Water fern
- Crassula Helmsii - New Zealand Pygmy Weed
- Elodea Canadensis - Canadian waterweed



Water fern



New Zealand Pygmy Weed

Banks

- Fallopia Japonica - Japanese knotweed
- Impatiens glandulifera - Himalayan balsam
- Giant hogweed



Japanese knotweed



Himalayan balsam

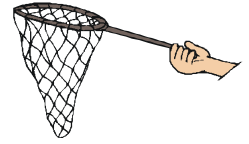
For more information, go to: <https://www.gov.uk/guidance/prevent-the-spread-of-harmful-invasive-and-non-native-plants>

CYANOBACTERIA

Cyanobacteria is **blue-green** algae caused by nutrient enrichment via pollution (usually from nitrates and phosphates) of slow moving or still water. Nutrient enrichment in ponds and lakes is called eutrophication. Cyanobacteria is toxic to humans and animals and all waterways suffering from cyanobacteria should be avoided.

TRANSFERRING DISEASE: & CLEANING EQUIPMENT

Disease and invasive species (including invasive species such as the American crayfish) can be transferred between ponds and rivers by people and equipment. This is why it is important to clean wellington boots and equipment, such as fishing nets and trays, thoroughly between visits to ponds or other waterways.



ENJOY!

Finally, after taking all of the necessary precautions, please do enjoy your visit. Ponds and rivers are a great resource from which to learn about the natural world, chemistry and biology and can be used to create fun and invigorating lessons for all key stages and ages.

