



POTENTIAL WILDLIFE HAZARDS



PLANTS

Spurges (*Euphorbia* spp)

The milky sap, or latex, of spurges is designed to act as a deterrent for grazing animals. Usually it is white, but in rare cases can be yellow. If it comes in contact with the eyes, nose or mouth, it can produce extremely painful inflammations. Any latex coming in contact with the skin should be washed off immediately and thoroughly. Once the latex hits the air it congeals and partially or completely congealed latex is often no longer soluble in water but it can be removed with an emulsion (e.g. milk, hand-cream). A doctor should be consulted regarding any inflammation, especially of the eyes, as severe eye damage, including possible permanent blindness, may result from acute exposure to the sap. Therefore spurges should be handled with care and children and domestic pets should be kept from coming into contact.



Euphorbia peplus or Petty Spurge (left) is a member of the *Euphorbia* family often found as a garden weed

Giant Hogweed (*Heracleum mantegazzianum*)

Giant Hogweed contains chemicals which produce changes in the cell structure of the skin reducing its protection against the effects of Ultra Violet radiation. These can be released from the plant simply by brushing against it. Exposure to sunlight after contact with the plant causes severe skin rashes and/or blistering and burns. The effects may not start until twenty four hours after contact but the resulting purple or black scars may last for many years. It may take several years for the skin to return to normal, during which time any renewed exposure to even quite dull daylight will produce new burns. Taken from http://en.wikipedia.org/wiki/Giant_Hogweed

Young leaves



Plant with flower



Characteristic purple speckled stem



Lords and Ladies (*Arum Maculatum*)

Lords & Ladies is a common woodland plant of the Araceae (or arum) family. It can grow in woodland or under hedges. It has many names including Cuckoo Pint, Cuckoo Flower, Jack in the Pulpit, Parson in the Pulpit, Devils and Angels and locally in Wiltshire and Gloucestershire, 'Snake Food.'

In April and May, purple spotted leaves appear followed by a poker shaped 'flower' (or spadix) which is often purple or sometimes yellow. In autumn the plant forms a cluster of bright orange/red berries. These berries are extremely poisonous and can irritate the skin, mouth, tongue, and throat and result in swelling of the throat, difficulty breathing, burning pain, and stomach upsets. Apparently the berries taste unpleasant and cause a tingling sensation as soon as they are put into the mouth.

All parts of the plant can produce allergic reactions and the plant should be handled with great care. For further details http://en.wikipedia.org/wiki/Arum_maculatum

The plant in spring (below) The plant in autumn (below)



Rhubarb Leaves

Eating rhubarb leaves can cause health problems. This is because they contain poisonous oxalates that are absorbed into the bloodstream and cause damage to the kidneys. However, it is thought that a large amount of rhubarb leaves would have to be consumed to make a person sick and it does seem to be common knowledge that only the stalks of the rhubarb plant can be eaten. It is well worth explaining this to children to ensure you have taken all the necessary precautions.

Symptoms of oxalate poisoning can include vomiting, nausea, difficulty in breathing, burning throat, stomach pain, diarrhoea and seizures. Extreme cases can lead to kidney damage and kidney stones and some cases can be fatal, though rare.

If such a condition is suspected, get to the casualty department of the local hospital.

Most people know better than to eat rhubarb leaves. Animals (such as rabbits and guinea pigs) however are unpredictable and your pet can display some of the same symptoms from rhubarb-leaf-poisoning.

Taken from www.savor-the-rhubarb.com

Common Ragwort (*Jacobaea vulgaris*)

Ragwort (pictured below) is a common plant in the Stroud area. It stands from 50-75cm tall with yellow, daisy-like flowers and is found on fields, waste ground and occasionally, school grounds. Some people think it is a dangerous plant and should be removed, but there is now some debate about its toxicity (for more information see www.ragwortfacts.com.)

Some people are concerned about handling ragwort because it contains chemicals called alkaloids, which are toxic to the liver and can cause liver failure. These alkaloids occur in 3% of all flowering plants but a human would have to eat 7kg (14 lbs) in weight in order to reach a lethal dose! It is believed that alkaloids which are absorbed through the skin are non-toxic and are harmlessly excreted from the system within 24-48 hours. There is no evidence that ragwort causes harm by contact or inhalation. In fact, there is very little evidence of harm to humans resulting from ragwort except for those with pre-existing liver damage and a couple of cases where very young children were given large amounts of a herbal tea made with ragwort as a cough medicine.

Although there is no evidence of ragwort harming healthy humans it is more of a problem for livestock. When fresh, it is normally avoided by horses and cattle due to its smell, but when dried in hay it is more likely to be eaten and cause death. You are not obliged to remove it from your land unless you are served with a notice and this is only likely to happen if it presents a danger to livestock.

These plants are visited by 150 species of insects (including bees, flies and butterflies). They are also the main food plant of the cinnabar moth caterpillar so they have tremendous value for wildlife.

Ragwort in flower



Cinnabar Moth



Cinnabar Moth Caterpillar



White Bryony (*Bryonia dioica*)

This climber is found in many hedgerows and field margins in the Stroud area.

The following information is taken from <http://www.plantpress.com/wildlife/o850-whitebryony.php>

White Bryony is the only British member of the cucumber family and is common in hedgerows. Its angled, bristly stem supports dull green, lobed leaves. It also has spirally coiled tendrils lying to the side of leaf stalks, which allows it to climb up to three metres. It has white five-petalled flowers. These are followed by shiny and rather soft, squashy red berries which are poisonous to humans, as is most of the rest of the plant, including the roots. Forty white bryony berries can be fatal for an adult and only 15 for a child (www.ehow.com.) Eating the berries in smaller quantities can cause serious vomiting, bloody diarrhoea, spasms and paralysis.

White Bryony flowers



Autumn berries



Stinging Nettles (*Urtica dioica*)

Stinging nettles are common in many gardens and are hard to avoid! It is best to wear gardening gloves but even then, children may still be stung. Nettle leaves are covered with small silky hairs which contain skin irritants called histamine and formic acid (also used by ants as a defensive spray. With its name coming from the Latin word for ant) that irritate the human skin. The itching is due to body defence mechanisms fighting these chemicals.



Left - Stinging Nettle

As the chemicals released by the nettles are acidic, by applying something that is alkaline/ basic, it can help reduce the pain.

You must first check if you are allowed to administer anything to the children in your care

Baking soda is an effective remedy to treat stinging nettles. Make a thick paste of baking soda by mixing with water and apply it at the affected area. Take care not to make the paste too watery, the thickness of the paste should be sufficient enough to apply at the affected area. Allow the paste to remain on the skin for about thirty minutes. But anything alkaline, even human saliva, can be applied to the affected area for immediate relief if no other solutions are available! Applying toothpaste has also been suggested! If symptoms persist, you can advise parents/carers to consult their GP.

Yew and Yew Berries (*Taxus baccata*)



Yew is highly dangerous and should be treated with care. All parts, except the flesh of the berries (or arils), contain taxin(e) a complex of alkaloids which is rapidly absorbed. Also present are ephedrine and taxphyllin. When taxphyllin is chewed it releases hydrogen cyanide which is one of the most potent, rapidly acting, poisons known. Where poisoning does occur, in animals or humans, there may be no symptoms and death may follow within a few hours of ingestion. If symptoms do occur, they include trembling, staggering, coldness, weak pulse and collapse.

Yew is one of the plants where the poison is not destroyed when the plant dies. Branches removed from a yew by high winds or pruning will retain their poison. The seed within the berries is highly toxic. Unbroken it will pass through the body without being digested but if the seed is chewed, poisoning can occur with as few as three berries.

Most incidents with yew relate to animals, with farmers reporting cases of poisoning in cattle when dead yew clippings have been dumped on grazing land. However, in the 1980s, four prisoners ate yew as a means of suicide, with three of the four succeeding.

http://www.thepoison garden.co.uk/atoz/taxus_baccata.htm

ANIMALS

Snake Bites

Snake bites are uncommon in the UK. There is only one native poisonous snake, the Adder (*Vipera berus*). Adders are known to be present in the Stroud area. Most snakes will slither away once they feel the vibrations of lots of children but just to be on the safe side consider the following.

Avoid leaving things on the ground such as tarpaulin or cardboard, because these get warm in the sun and would be attractive to snakes. Take care when removing black enviro fleece in warm weather.

If your garden has long grass, ensure that the children wear long trousers or boots. Get the children to make lots of noise and stamp their feet when approaching. Get an adult wearing long trousers or boots to check the long grass first by beating or bashing the grass 3-5 paces ahead, then stand still for a time before moving on to the next patch of long grass. Most snakes would prefer to slip quietly away and will only bite when cornered or stepped on.



An adder with its distinctive markings

First aid

Get the child to hospital and contact the parents.

Immediate action

If a snake bites you or someone else you should follow the advice listed below.

1. Remain calm and do not panic. Snake bites, particularly those that occur in the UK, are rarely serious or fatal.
2. Try to remember the shape, size and colour of the snake.
3. Keep the part of your body that has been bitten as still as possible because this will prevent the venom spreading around the body. You may want to secure the bitten body part with a sling (a supportive bandage) or a splint (a rigid support that helps keep the body part stable). However, do not make the sling or splint so tight that it restricts blood flow.
4. Remove any jewellery and watches from the bitten limb because they could cut into the skin if the limb swells. However, do not attempt to remove any clothing, such as trousers.
5. Seek immediate medical attention

If you or someone else is bitten by a snake you should **NEVER**:

- Suck the venom out of the bite.
- Cut the venom out of the bite wound with a knife or other instrument.
- Rub anything into the wound.
- Apply any tight bandage around the bitten limb to stop the spread of venom, such as a tourniquet or ligature. This does not help and can cause swelling, even if no venom has been released by the snake. It can damage the affected limb and amputation of the limb may be required in extreme cases.
- Try to catch or kill the snake.

<http://www.nhs.uk/Conditions/Bites-snake/Pages/Treatment.aspx>

Bee & Wasp Stings

In a normal school vegetable garden there will be lots of insects and even those that can potentially sting, such as bees & wasps, represent little or practically no threat unless you provoke them. So avoiding being stung in the first place is the best course of action!

You can avoid being stung by an insect by:

1. Wearing long-sleeved shirts and trousers outdoors
2. Not disturbing an insect's nest or bees foraging for nectar
3. Avoiding areas where there are likely to be lots of insects, such as clusters of flowers and piles of wood
4. Moving away slowly without panicking if you encounter wasps, hornets or bees (do not wave your arms around or swat at them!)

However, sometimes you cannot avoid being stung e.g. if you sit on a bee! If someone gets stung the NHS gives the following advice:

Treating insect stings

Only the females of the honey bees can sting, but rather than having a smooth sting, their stingers are hooked. For this reason, when a honey bee stings, part of the sting often remains in the skin and is visible to the eye.

You should remove this immediately by scraping it out using something with a hard edge, such as a bank card or the edge of a ruler. Do not use a sharp item that may cause you to cut yourself. Do not pinch the sting out with your fingers or tweezers because you may spread the venom or you may cause it continue to pump in the venom. Other bees and wasps do not leave their stings behind.

To treat an insect sting, after you have removed the sting (if you were stung by a honey bee):

1. Wash the affected area with soap and water
2. Put a cold flannel on the area
3. Raise the part of your body that has been stung to prevent swelling
4. Avoid scratching the area because it may become infected

If the sting is painful or swollen, you can also:

- Place an ice pack on the area (try a bag of frozen peas or some ice wrapped in a towel)
- Advise parents/carers to administer painkillers, such as paracetamol or ibuprofen
- Advise parents/carers to use a spray or cream containing local anaesthetic, antihistamine or mild hydrocortisone (1%) (available at pharmacies) on the affected area to prevent itching
- Advise parents/carers to administer an antihistamine tablet (available on prescription or from pharmacies) to help reduce swelling
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If the redness and itching get worse or do not clear up after a few days, see your GP.

When to seek medical help

Seek emergency treatment if you have any of the following symptoms immediately after being stung:

- Swelling or itching anywhere else on your body
- A skin reaction anywhere else, particularly pale or flushed (red or blotchy) skin
- Wheezing or difficulty breathing
- A headache
- Nausea, vomiting or diarrhoea
- A fast heart rate
- Dizziness or feeling faint
- Difficulty swallowing
- Confusion, anxiety or agitation

Call 999 and ask for an ambulance, because this type of reaction can be fatal.

If a member of the gardening club is known to be allergic to insect stings, they may carry a syringe (called an auto-injector) loaded with adrenaline. If they do, seek advice regarding what you need to do if they get stung. You may also need to be trained how to use the auto injector if they are unable to administer it. (www.nhs.uk/conditions/Stings-insect/Pages/Introduction.aspx)

If you get a swarm of bees in your school garden

In a school garden if you get a swarm of bees or a wasp's nest, it is best to get advice to see if you really do need to take action. If you are in the Stroud area, contact Stroud Beekeepers www.bbka.org.uk/local/stroud. Very often, it is not necessary to remove bees at all. For example, many nests only last a short while and swarms will often move on by themselves. If you need to remove honey bees, call a beekeeper to assist you. If appropriate, they may be able to use a smoker to calm the bees, then move them safely to a more appropriate place. They will also ensure no honeycomb is left behind, otherwise, this could attract more bees, or even wasps, once the original honey bees have moved on. If you need to move a bumblebee nest, the same applies. Keep your distance from the bees and keep pets and children away.

Bees are rarely aggressive unless provoked, so avoid aggravating them (www.buzzaboutbees.net/get-rid-of-bees.html.)

Ticks

If a child has been bitten by a tick, it is important that it is removed as soon as possible to reduce the risk of getting a tick-borne infection, such as Lyme disease (a bacterial infection that causes a rash.) As a garden club leader you will **NOT** be expected to do this but you may be asked what to do by parents/carers. The following is the NHS advice

To remove the tick:

1. Use tweezers, wear gloves or cover your fingers with tissue to avoid touching the tick.
2. Grab the tick as close to the skin as you can, and gently pull straight up until all parts are removed.
3. Do not twist or jerk the tick as you are removing it because this may cause the mouthparts to break off and remain in your skin once the tick has been removed.
4. Wash your hands with soap and water.

Using petroleum jelly, alcohol or a lit match to remove a tick **does not** work.

After care

- After the tick has been removed, clean the tick bite with soap and water or an antiseptic (a substance that reduces the growth and development of germs), such as an iodine scrub.
- Do not scratch the bite because this will cause further swelling and increase the chance of infection. Most tick bites will heal within three weeks.

See your GP if you develop:

- A rash
- A fever (high temperature) of 38 °C (100.4 °F) or over

You may need antibiotics to prevent Lyme disease. See the Health A-Z topic about Lyme disease for more information about this condition, including the symptoms and treatment.

<http://www.nhs.uk/Conditions/Bites-insect/Pages/Treatment.aspx>

A tick



A tick embedded in the skin

