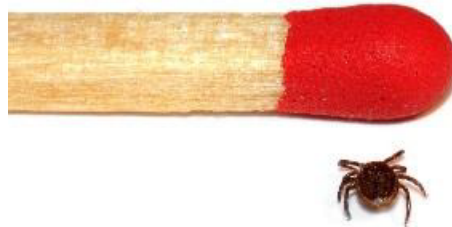


## Ticks & Lyme Disease.

### **Ticks**

A tick is a small, blood-sucking mite. It lives on blood from mammals, including deer, sheep and rabbits. It cannot jump or fly; it crawls. The tick sits on vegetation, including trees, waiting for a possible 'host' to walk by. If a tick attaches itself to someone, it will typically find its way to a warm, moist and dark place on the body (like the crotch or the armpit). It will then insert a probe into the skin and begin sucking blood. In most cases the tick will leave after a while, or the host will get rid of it without any harm having been done. However, some ticks carry a small micro-organism called *Borrelia* in their stomach. This is what causes Lyme disease.



*A tick pictured alongside a match-head*

A feeding tick on one's body doesn't usually cause any pain, but it is still important to get rid of it because of the risk of Lyme disease. Every year about 300-500 cases are reported.

### **What is Lyme disease?**

Lyme disease, (borreliosis), is an infection spread to humans by ticks infected with the the borrelia micro-organism. The disease is spread by ticks when they bite the skin in search of blood. The disease is not contagious from an affected person to someone else and not all ticks carry the bacterium.

However, it is prevalent in the Scottish Highlands where an estimated 10% of all ticks carry the organism. People who enjoy the countryside should be aware of the potential for ticks to cause health problems. Prompt removal of the tick before it becomes "engorged" is thought to reduce your risk to almost zero.

### **Symptoms & Effects.**

Lyme disease affects different areas of the body in varying degrees as it progresses. In most patients, (but not all), the classic sign of early local infection is a circular, outwardly expanding rash called *erythema chronicum migrans*. This occurs at the site of the tick bite 3 to 32 days after being bitten. The rash is red, and may be warm, but is generally painless. (*Be aware that Lyme disease can progress to later stages even in patients who do not develop a rash.*)



*The rash, 'erythema chronicum migrans' which may develop within 3 to 32 days after being bitten with an infected tick.*

### **Early symptoms of Lyme disease can include -**

- \* A skin rash, often resembling a bulls-eye

### **Later stages (weeks or months later)**

- \* Fever
- \* Headache
- \* Muscle pain
- \* Stiff neck
- \* Swelling of knees and other large joints
- \* General 'flu-like' symptoms.

The disease can later produce abnormalities in the joints, heart, and nervous system. However, most cases of Lyme disease are curable with antibiotics.

Please bear in mind, if you search this subject matter on the internet, that the pattern of illness with Lyme's disease encountered in the UK is not the same as the more aggressive form encountered in the USA. Many of the websites dealing with this illness are American and describe the situation in the USA, where Lyme's disease more often causes late stage problems.

### **When to seek medical help.**

Late, delayed, or inadequate treatment can lead to late manifestations of Lyme disease which can be disabling and difficult to treat. It is important to know when to seek help. If you develop a spreading rash, (see photo example), after a tick bite, consult a doctor.

If you develop any late stage symptoms, and you have had a tick bite in the past, let your doctor know and you will be checked for the infection with a blood test. (The late stage symptoms are common to many other conditions, which makes diagnosis more difficult). Luckily it is still quite uncommon for late stage Lyme disease to occur in Scotland.

### **Tick Removal.**

Expert opinion suggests that prompt removal of an infected tick within 24 hours, reduces the risk of transmission to nearly zero; however the small size of the tick, especially in the nymph stage, may make detection difficult.

Ticks can be removed gently with special tweezers, (Tick Twisters), which are available for a small fee from various outlets including the Health Centre in Grantown. If you do not have ready access to these 'Tick Twisters', do bear in mind that it is important not to squeeze the tick during removal as this could have the detrimental effect of injecting the tick's infected stomach contents into you!

Have a look at <http://www.ticktwister.com> which shows an interesting video on the subject of tick removal.

### **Prevention.**

Prevention is always better than cure. Therefore, because Lyme disease is transmitted by ticks attaching to the body, tick-bite avoidance techniques are important.

The use of insect repellent on skin and clothing can help. The tick will normally have to crawl over clothing to reach an accessible part of its human host and so the wearing of long trousers tucked into socks and long sleeves can protect the skin. Clothing, including footwear and chest waders should be frequently examined, both inside and out, for ticks. These small dark insects can be hard to see on dark clothing and so lighter coloured clothing could be considered.

Be aware that ticks can find their way into your car and home from your own outdoor clothing. They will then be free to seek-out other members of your family.

When you arrive home after a day in the country, it can be good practice to stand in front of a mirror and check yourself for ticks. Even if you have been wearing chest waders all day, there is still a chance that a tick could have found its way onto your clothing and started to feed on you.

A practical, common-sense approach to ticks and Lyme disease should ensure that you stay disease-free whilst fishing in Grantown on Spey.

*This information has been produced with the kind advice and assistance from Dr Boyd Peters, Grantown on Spey.*

*Jimmy Mitchell*