



South Hants Koi Club

Koi Health and Welfare

Parasite Identification

We have included in this guide, digital reproductions of seven types of parasites which we have encountered during the past six months – the illustrations which follow are ‘what you may see when looking down the microscope’

| <i>Parasite</i> | Comment |
|--------------------------------------|--|
| Skin Fluke (Gyrodactylus) | A very common parasite and only problematic in large numbers. The S/F bears its own young and the developing embryo is often seen inside the parent. Difficult to eradicate completely. |
| Gill Fluke (Dactylogyrus) | Generally much smaller than the skin fluke, maggot like and easily recognisable by its four ‘eye spots’. Egg layer, causes sever damage to the gills and difficult to eradicate. Because of gill hyperplasia and increased mucus, the gill dwellers are afforded a high degree of protection. Must be eradicated fast or outlook poor. |
| White Spot (Ichthyophthirius) | Dormant in most fish and activated by rapid changes in temperature and environmental changes. Easily recognizable by the dark constantly turning Trophont and light ‘horseshoe’ shaped nucleus. It has a fairly complex life cycle, can cause severe gill damage and reasonably easy to eradicate when the Tomites are in their free swimming stage. |
| Chilodonella | Recognisable by its slow gliding movements, often turning in circles, heart shaped. It is a potentially dangerous parasite and should be eradicated |
| Trichodina | Easily recognisable by is ‘Catherine wheel’ and hovering/ skimming movements. Can cause skin lesions which become infected in substantial numbers. Thrives on poor water quality, high organic content and overcrowding. Not difficult to eradicate. |
| Costia | Usually found as a ‘secondary’ parasite. Very small and recognised by its rapid flickering movements – best observed at the liquid/ mucus interface. Causes serious tissue damage to skin & gills. Common strains not difficult to eradicate although resistant strains problematic in other areas of the country & continent. |
| Epistylis | A fairly rare parasite but five cases recently observed in a four week period! In large numbers, forms whitish fuzzy patches on the skin which can progress to form ulcers where secondary infection can occur. Not difficult to eradicate. |



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There are many other parasites which we have not included such as Anchor Worm, Argulus, Leeches etc. – only the common ones have been dealt with at this stage.

As treatments can vary considerably depending upon water chemistry, temperature, environment, these will be dealt with separately.

Provided the Pond Management parameters are kept under control and quarantine procedures for new Koi adhered to, parasites should not pose a problem
