

Fish health and fisheries management

Introduction

Every year, over 100 stillwater fisheries suffer severe outbreaks of fish disease. These cause the deaths of 1000's of fish and damage the businesses or angling clubs that run them. This can mean a loss of fishing and is a distressing sight for anyone who enjoys fishing.

Recovery can take a long time and be very expensive. In some cases, anglers will never visit a fishery again if they have seen dead fish.

But, most of these disease outbreaks could be avoided. Although in many cases it is diseases that kill the fish, it is usually the management of the fishery that has put them at risk. The underlying causes of fish deaths in our stillwater fisheries can be managed, preventing the losses that damage fisheries and businesses.



The sad sight of a fish mortality.

What causes fish disease?

Organisms that cause disease, including parasites, viruses, bacteria and fungus are called pathogens. Some of these pathogens are present in our fisheries all the time. They are native to England and Wales and are a natural part of our fisheries. They do not usually cause disease problems as the immune system of healthy fish will fight the challenge of the pathogen.

Pathogens can cause disease if:

- they are introduced to a new fish population that does not have a natural resistance to the pathogen;
- the fish's immune system is reduced, because the fish is ill, in poor condition or stressed.

Introduced diseases

This is most common with pathogens introduced from abroad. These are known as Category 2 and novel parasites, and notifiable fish diseases. For example, the viral disease Spring Viraemia of Carp causes the death of carp, if infected fish are introduced from parts of Europe or Asia where the virus is present.

Stress

Healthy fish, living in a good environment, will have strong immune systems. However, if the fish live in a poor environment, they may become stressed. This reduces their immune system making them unable to fight pathogens, increasing the risk of disease outbreaks. Even introduced diseases (like Koi Herpesvirus) may be more likely to cause death if the fish are stressed.

But, fishery managers can reduce the risk or impact of disease on their fisheries. In stillwaters the fishery manager is often able to change the things that cause stress to fish, ensuring they are healthy and the fishing is good.

Fish health and fisheries management – fact sheet series

We have produced this set of fact sheets to provide the basic information that can prevent fish disease outbreaks in your fishery. They cover the main diseases to be aware of, the management of habitat and water quality and the management of fish stocks and fish introductions. Should a disease outbreak occur, they explain what to do if fish are dying and how to help your fishery recover afterwards.

Each fishery is unique, so these fact sheets can only provide an overview. You should always seek specialist advice. But many of the steps in preventing disease outbreaks are easy.

Following good fisheries management advice will protect your fish, your fishery and your business or angling club.



A healthy fishery at dawn.

This fact sheet has been produced by:

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customer service line

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www.environment-agency.gov.uk

incident hotline

0800 80 70 60

floodline

0845 988 1188

Fact sheets in the series

Looking out for fish disease
Fishery habitat
Water quality
Fish stocking density
Stocking your fishery
Fishery biosecurity
What to do if your fish are dying
Life after a fish mortality

Fish pathogens

Bacteria

Aeromonas hydrophila and *Aeromonas sobria*
Aeromonas salmonicida in cyprinids
Shewanella putrefaciens group

Parasites

Blackspot (*Posthodiplostomum cuticola*)
Chilodonella
Coccidian parasites
Ichthyobodo necator
Leeches
Management of the fish louse *Argulus* in stillwater trout fisheries
Myxosporidean parasites
Whitespot (*Ichthyophthirius multifiliis*)

Viruses

Carp pox

Others

Fungal infections

Further reading

The management of intensively stocked stillwater coarse fisheries including codes of practice and the biosecurity codes of practice (2007)

A. Girdler

Available from: Institute of Fisheries Management (www.ifm.org.uk)

The Sparsholt guide to the management of carp fisheries (2001)

C. Seagrave

Available from: Mitchellwing Publications, c/o Sparsholt College, Winchester

Fisheries advisory booklets (1998)

Environment Agency

Available from: www.environment-agency.gov.uk

More advice

To report a fish mortality or for more information and advice contact your nearest Environment Agency fisheries officer:

Environment Agency – office hours

National Customer Contact Centre (NCCC)

Tel: 0870 506506

www.environment-agency.gov.uk

Environment Agency – emergency hotline

Tel: 0800 807060

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Environment Agency

Bromholme Lane

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For information on notifiable fish diseases, contact:

Fish Health Inspectorate (FHI)
Centre for Environment, Fisheries & Aquaculture Science (Cefas)
Barrack Road, The Nothe
Weymouth, Dorset
DT4 8UB
Tel: 01305 206600
www.cefasc.co.uk

Department for the Environment, Food & Rural Affairs (Defra)
Food and Farming Group (FFG)
Tel: 08459 33 55 77
www.defra.gov.uk

For information on fish movements:

eFishBusiness (England and Wales)
Environment Agency and Cefas
www.efishbusiness.co.uk

For further advice on fisheries management and available courses, contact:

Institute of Fisheries Management (IFM)
22 Rushworth Avenue
West Bridgford
Nottingham
NG2 7LF
Tel: 01159 822317
www.ifm.org.uk

Fisheries and angling groups:

Angling Trust
Eastwood House
6 Rainbow Street
Leominster
Herefordshire
HR6 8DQ
Tel: 08447 700616
www.anglingtrust.net

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Professional Coarse Fisheries Association (PCFA)

Federation House
National Agricultural Centre
Stoneleigh Park
Warwickshire
CV8 2RF
Tel: 02476 414999
www.pcfa.co.uk

English Carp Heritage Organisation (ECHO)

The ECHO Office
16, The Parade
Yateley
Hampshire
GU46 7UN
www.echocarp.co.uk

Salmon & Trout Association (S&TA)

Fishmongers' Hall
London Bridge
London
EC4R 9EL
Tel: 02072 835838
www.salmon-trout.org

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