



P R E F A C E

Fishing in the Fish's World

The idea of this book came to me during a fishing trip. I was fly-fishing on a large freshwater lake when the weather turned. A heavy rainstorm moved toward me, casting a shadow over my boat. As the rain hammered down, the four flies I had laid just beneath the surface were taken within seconds by four fish. Was this a coincidence?

Every fisherman will remember a time when a change in the weather coincided with a surge or lull in fish feeding behavior. Whatever the species and whatever the weather event, there is no doubt about the dramatic and immediate influence weather can have on fishing action.

Weather forecasts are broadcast many times each day because of weather's influence on our own lives and behavior. The first thing we do in the morning is open the curtains and look at the weather. If this changeable factor is so important to us, with all our technological buffers, clothing, and shelter, it is easy to appreciate how significant it must be in the lives of wild animals, including fish. With climate change bringing even more dramatic weather extremes, the ability to read the impact of weather on fish is becoming an even more valuable tool to the angler.

Almost all animals have a much more refined ability to sense changing weather than we meteorologically blind humans. Relatively harsh extremes of weather may seem little more than beautiful displays when viewed from heated homes or cars. We react only when caught in the teeth of the most severe conditions, whereas fish are able to detect and adapt to the subtlest changes.

Even minor changes in a fish's immediate surroundings disrupt the fine equilibrium the fish maintains with its environment. These constant changes mean that the hot fishing spot of a few hours ago may now be empty water because the fish have moved elsewhere.

There is much debate in fishing magazines and along the riverbank about the exact influence of weather and other environmental variables on fish. While studying for my degree in marine and freshwater biology, I noticed that there was a great deal of information of use to anglers between the equations in the research papers I was reading. It is the aim of this book to replace rumors and opinion with facts revealed by scientific research. This understanding will give the reader a better knowledge of where fish are, and thus an enhanced ability to catch them. Scientific jargon has been kept to a minimum, and source references have been kept out of the text to make the content more accessible. A full list of sources can be found at the back of the book both to credit those who carried out the initial research and for those wishing to learn more about any given subject. Where an experiment is



What does it feel like to live in the fish's world?

mentioned in the text, full details can be found in the Notes section at the back of the book.

Meteorologists often get their weather predictions wrong, not because of faulty equipment or lack of expertise, but because the weather is influenced by so many variables that it is difficult with today's technology to measure and account for them all in a workable model. Similarly, any attempt to be dogmatic about fish behavior would be wrong given the dynamic nature of the subject. There are variations of behavior between one species and another and even between fish of the same species in different locations. There are few certainties, but, as we shall see, certain weather combinations encourage certain behaviors in certain species of fish. While knowledge of the factors influencing the location and feeding habits of fish will improve your fieldcraft and success, a large part of the pleasure of fishing is that there are rarely any guarantees. There are almost always exceptions to the rules.

In this book, we will examine how fish behave and think. We will look at the fishes' anatomy and sensory systems. The book covers fish welfare and the influence of light, oxygen, and temperature. We will discuss how weather changes such as wind, ice, rain, and snow can influence the behavior of fish. We will examine the impact of competition, predation, flooding, and seasonality on fish feeding.

As we will see, fish are significantly more intelligent than many people think. If the reader leaves this book with a greater respect for fish then my job will be done. Before we get into how fish react to changes within their environment, it is important to understand the animal we are dealing with. What would it be like to be a fish?



Understanding how fish think, and how they perceive and react to their environment, will make your angling more interesting and more successful.