



# Do Your Fish Need A Physical Exam?

## Try Electroshocking.

By Greg Grimes

If you're like most pond owners you probably have some questions about the condition of the fish in your pond. Are they as fat as they should be? How can you tell? The techniques described below provide ways to determine if your bass are as healthy as you desire whether you are a novice or experienced pond owner.

Many of you have heard of electrofishing, but what is it and how does it work? Electrofishing is the most advanced pond management, fish analysis tool available to pond owners today. It gives fisheries biologists a powerful insight into your fish population and allows them to give your bass and bluegill a thorough physical exam. If you have never had this performed on your pond, you may have misconceptions about how it works.

A typical electrofishing boat transmits an electrical current from a generator through a sophisticated control box to a set of electrodes that are dangled from the front of the boat into the pond. An electrical field is formed around a relatively small area of the electrodes. Fish within this field are stunned and float to the surface where they can be captured with a long-handled dip net. When performed at the right time of the year, it provides a great way to quickly get a representative sample of bass, bluegill, and other fish that might be present. This does not harm the fish. In fact, almost all state and federal agencies obtain their brood fish by electrofishing.

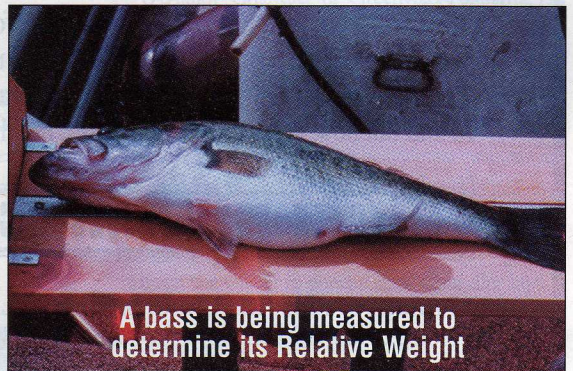
Electroshock analysis provides insight into the current state of your fish population. It

provides critical data needed to set recommendations to achieve the goals you have for your pond. The data gathered is used by fisheries biologists to determine predator to prey balance, competitive species presence, carrying capacities, catch per unit effort, total species composition, etc. Electrofishing is a strong tool that you should consider for good fisheries management. In this issue, you can find many qualified fisheries professionals that can provide this valuable service.

Even without electrofishing you can perform one of the more simple analysis techniques – a Relative Weight (RW) index. If you're a good fisherman, and you can catch 10 to 20 bass in your pond, then you can calculate the RW index, with a little help from the Relative Weight Table and me.

Relative weight is a measure of the current condition of your fish. It determines the plumpness of the fish and indicates if it is relatively fat or skinny. The relative weight index is the ratio of the actual fish weight to a standard fish weight. To calculate your relative weight index, divide the actual weight of your fish by the standard weight for a fish of the same length listed in the attached RW table. Not too difficult, huh?

RWs need to be performed with accurate measurements, especially on the smaller fish. Measure fish to the nearest 1/2 inch and



A bass is being measured to determine its Relative Weight

weigh to the nearest 1/10 of a pound. This requires an accurate scale. To provide an example of how RW is calculated, you catch an 11.5-inch bass weighing 0.6 pounds. Look on the RW table to get the standard weight for a bass 11.5 inches. As you see, it is 0.8 pounds. Divide the weight of your bass by the standard weight.  $RW = 0.6 / 0.8$ . This bass would have a 75 percent RW. If your goal is trophy bass, strive for RWs greater than 100 percent.

It is best to perform the analyses throughout the year on several size classes of bass. This will indicate the overall condition of your bass at year one. Then you can compare the RW over the next year to see if the bass are getting fatter, staying the same, or getting skinnier. RW can also be computed for your bluegill to get even more clues on the overall condition of your fish population.

In the south, a RW of over 85 percent indicates an average, healthy largemouth bass. I've seen RWs less than 60 percent in some lakes. This may be due to low fertility, excessive weed growth, or presence of competitive species. In most cases, however, it is because not enough bass have been removed over the years. By simply pulling out a target number of bass, you can see the RWs go up. Ponds have gone from

