

LET'S TALK ABOUT FISHING

Are you going fishing during your stay in the Park? Fine! We hope your luck is good. A lot of thought and effort has gone into maintaining the lake or stream so that you can enjoy your favorite sport. Let's take a glimpse through the eyes of the man who does the jobthe Park Ranger.

He, together with all other park people, tries to carry out the instructions of Congress to keep the plants, animals, and park scenery in as nearly an unspoiled condition as possible. Nature thus preserved in its original state will remain a constant source of pleasure to future generations of Americans. An exception to the general plan is made in the case of game fish. Wise management will enable us to use them without destroying natural values. For this reason, angling is permitted.

Efforts are made to encourage the fish which are natural in the area and to limit the spread of strangers like the brown trout. Even a truly American fish like the Rainbow is 'off the reservation' when he gets east of the Rockies. Non-native fish may do well instrange waters, but usually their presence does not increase the total amount of fish which is available to the fishermen. The foreigners merely take the place of the rightful inhabitants which become less numerous or may get disgusted and leave altogether. The net result is different fish rather than more fish.

Fish, like other types of animals, thrive best on fertile pastures. It so happens that most national park waters, especially those in mountain areas, are not rich in food. Therefore, the size of the annual fish crop from each mile of stream or acre of lake is not large. To maintain good fishing for the ever increasing fishermen, carefully planned stocking and a few simple fishing rules are necessary. In the following pages we shall try to show you some of the "why's" and "how's" behind the fish program in order that you may help us with better understanding.

THE BACKGROUND FOR FISH MANAGEMENT

If the maximum amount of fish is to be provided year after year, we must know something about how fish live, the kind of place they live in, and the things that limit their numbers. After these questions are answered, we must have information on how many fish and what kinds are caught each season. Carefully trained observers gather information from creel census, fish population counts, chemical analysis of the water, and general inquiry into fish habits. In addition, we must study the methods and habits of the angler.

While you are whipping the stream you may see one of these observers at work, or as you leave the water you may be requested to show your catch and answer certain questions which will aid in making future plans. If you have a chance to make such a contact you will find it interesting, and also you will be able to give information which may help materially to maintain good fishing. It will be helpful if you will report to the observer or a park ranger, any unusual fish taken or seen, or other uncommon occurrence such as water condition, stream insects, etc.

THE RULES

The fishing rules which you have obtained from the park office or ranger may in some instances seem unnecessary. If so, let's have a look at the reasons behind them. All limitations aim at accomplishing a few things which are necessary to give the fish an even break and give everybody a good time.

First, enough spawning fish should be left in the water at the end of the season to provide a crop of small fish the following year. This means that the total take for the year must be limited.

Second, the fish available for the season must be divided fairly among the fishermen and taken slowly enough so that they will last throughout the entire season.

Third, fish should be taken at a size which is desirable to the angler and which will provide the greatest catch each year from the lake or stream.

Finally, damage to the lakes and streams by destructive methods of fishing, and the introduction of undesirable fishes or other aquatic life, must be prevented.

Those of you who have fished in several park areas may have wondered why rules differed between parks and sometimes between parks and adjacent States. The National Park System stretches from tropical swamps to arctic tundra and includes rich and poor waters. In some places the growing season is short and in others it is long. All of which adds up to the fact that there are a lot more fish to be had in some waters than in others. Consequently. seasons must vary in length and catch limitations must be greater or smaller. Where several hundred pounds of fish are available from each acre of rich water, catches can be much more liberal than where only from 10 to 15 pounds of fish per acre of poor water are present.

In addition to a wide variety of waters, national park areas contain most of the common

game fishes found in the United States. We all know that fast growing bass and sun fish in warm waters require less protection than Eastern brook or cutthroat trout which live in cold mountain lakes or streams. Even in the individual stream, the size and makeup of the fish population does not remain constant. When fish are abundant, the fisherman may take more; when they are scarce, he must take less. These natural fluctuations mean changes in the rules-sometimes from year to year.

You probably feel as we do that it is better to use all the facts than to pick the answers out of a hat. Nevertheless, you would probably still like to ask a few questions.

WHY HAVE CREEL LIMITS?

Start with the fact that there are only a certain number of fish in your favorite water. If you take all you want there won't be enough for the next fellow. Remember, you may be the 'next fellow.' Also, other fishermen would like to be able to catch some fish after July 4; so would the man whose vacation comes in August. There is another point too. The total take must not be so large that all the fun will come this year and there will be no fish to produce the small fish for next year. These are the reasons why a limit is fixed on each day's catch.

WHY ARE SIZE LIMITS SET?

When fish are small and growing fast they use food more effectively than later in life. If they are taken when too small, most of the available food cannot be converted into fish flesh and so the angler is the loser. In some cases there are so many fish that food and space are not sufficient to let them grow up. Size limits may then be taken off entirely. Occasionally, size limits are set to protect

spawning stock so that enough fish reach spawning size to carry on the population.

WHY ARE THERE CLOSED SEASONS?

There are closed seasons for the same reasons that there are catch limitations-to restrict the total annual take. Opening dates are usually set late enough so that fish may overcome poor condition caused by light winter feeding. In some cases seasons are closed to protect spawning fish during migration when they are concentrated and easily caught.

WHY ARE SOME WATERS CLOSED?

When you come to a sign that declares fishing is not allowed, its purpose is not to create a fish refuge or to keep you out of a "greener pasture." Closure is temporary to let a lake or stream recover its population by natural reproduction. Some areas are kept permanently closed because fish regularly gather there in large numbers without adequate natural protection. A water may also be closed to protect hatchery operations or domestic water supply or to lessen fire danger. Sometimes it is necessary to exclude fishermen in order to protect nesting waterbirds (such as trumpeter swans) which otherwise might abandon their eggs.

WHY IS THE USE OF LIVE FISH AND SOME OTHER NATURAL BAITS PROHIBITED IN NA-TIONAL PARK WATERS?

To fishermen whose favorite bait is a lively minnow, there may seem to be no satisfactory answer. To him we should point out that many good fishing waters have been spoiled by introduction of undesirable fishes which originated in the angler's minnow pail. Such unwanted species have been known to multiply

until they crowded out the natives and ruined the fishing. To avoid this danger, the use of live fish as bait is prohibited. Some other live baits may be forbidden in certain areas to prevent the establishment of unwanted intruders. Digging of worms and disturbance of logs to gather grubs may also be discouraged in order to preserve stream banks and the park landscape.

WHERE AND WHY ARE FISH STOCKED?

Perhaps you wonder why we can't dispense with a lot of regulations simply by increasing the fish supply through stocking. It is a good thought and has been thoroughly worked over during the past 70 or 80 years. This time-honored custom has been used to introduce many kinds of fish and, under proper conditions, to help maintain or increase natural fish populations. Sad experience has taught us, however, that when we stock blindly, without knowledge of the real needs, more harm than good may result. As many waters have been ruined by unwise planting as have been benefited.

Fish used to be stocked on the same principle that is employed with grain--to have corn, plant corn; to have fish, plant fish. Of course, if the corn field is already well seeded, one doesn't replant it the next week to get more corn. In a similar situation, however, we have often planted small fish in waters which were naturally well stocked, thus hoping to get more fish. When a field is unplanted or a stream is barren of fish, seeding is the only means to production. On the other hand, when fish reproduce in their normally prolific manner, great care must be taken to avoid overcrowding and waste by over-enthusiastic planting of hatchery fish. In general, a stream will produce a certain weight of fish each year depending on the presence of food and general conditions for growth. When there are few fish, they will be large. If fish are

overcrowded, they will be small. Thus stocking more fish than the food and shelter will support is harmful.

ARE FISH STOCKED IN NATIONAL PARKS?

Hatchery-reared fish are planted in national parks (1) in waters where spawning stock is too small to produce a full population; (2) where spawning activities are not successful, because spawning beds are unsuitable, or because the eggs and newly hatched fish are destroyed by heavy floods or severe winter conditions; (3) where water will maintain fish, but where spawning is impossible. Some high mountain lakes are examples of this last condition.

To avoid waste or harm to the fish population, stocking is not done where (1) waters are unsuitable for the fish; (2) where native trout are not unduly reduced and spawning is normal; (3) where waters are inaccessible and naturally reared fish are not fully harvested each year; (4) in research reserves, or elsewhere, when it is decided that the waters should be kept in a strictly natural state.

Your cooperation is essential if we are going to maintain good fishing for you. Remember, trout fishing is a fine sport that is expensive to maintain. Therefore, let's fish for fun and not just to bolster the family meat supply. When you want good sport, keep a few for a meal and release the rest so they can bite again. Don't squeeze the fish when you release him. When possible, leave him in the water while you take out the hook. If you would catch more, kill less.

