

THE USE OF FISH TOXICANTS

ROTENONE

Rotenone generally used for fish eradication is available in three forms--general purpose (2.5 percent liquid), special purpose (5 percent liquid), and powdered derris (5 percent rotenone).

Permission to eradicate fish with chemicals must be obtained from the Oklahoma Department of Wildlife Conservation.

The Pure Food and Drug Administration recommends that fish killed with chemicals not be used for human food or fed to domestic animals.

Amount to Apply:

1. For fishes, except bullheads, apply one gallon of general purpose formulation (2½ percent emulsifiable rotenone) per six acre-feet of water, or apply derris powder at three pounds per acre-foot.
2. For bullheads and other resistant species, apply ½ gallon of special purpose formulation (5 percent emulsifiable rotenone) per acre-foot or apply derris powder at 6 or 7 pounds per acre-foot.

Methods and Time of Application:

The liquid formulations should be mixed with at least twice their volume of water and sprayed on or under the water. Powdered derris should be first mixed with water and then distributed throughout the pond water. The toxicant should be applied three to four weeks prior to restocking and when the temperature of the water is above 70° F. The higher the temperature of the water the more effective the chemical.

ANTIMYCIN (FINTROL-5)

1. Fintrol is a specially formulated compound designed to eradicate undesirable fish from freshwater ponds, lakes and reservoirs. Formulated on sand, Fintrol-5 releases the active ingredient uniformly from the surface of the water through a depth of approximately 5 feet. Its action is certain and irreversible.
2. Fintrol is effective at a very low concentration. Consequently, the total volume of water, pH, water temperature and species to be eradicated must be accurately determined.
3. Biodegradation of Fintrol occurs rapidly in the water. Complete biodegradation usually occurs in 48-168 hours, depending upon concentrations employed and such variable factors as pH and temperature of water.

C A U T I O N

Use protective gloves and protective goggles when applying Fintrol by hand or by power spreader. Any contact of Fintrol with the eyes can cause intense pain and irritation immediately or within several hours following contact. Avoid contact of Fintrol with skin. If any contact occurs with eyes or skin, flush repeatedly with water immediately. Consult physician if discomfort persists.

How to Estimate the Amount of Fintrol Needed

The amount of Fintrol needed to treat any given body of water is mainly dependent on (1) number of acre-feet to be treated, (2) pH and water temperature and (3) species to be eradicated.

Calculate the acre-feet of water present in the pond or lake. Measure the square yards of surface area of the lake or pond. Divide this square yards area by 4,840 to determine the acreage area of the surface. (An acre is 4,840 square yards.) Multiply the surface area in acres by the average depth of the body of water in feet. The result is the number of acre-feet of water present.

Determine the pH and the average water temperature by measuring at various sites and depths in the pond or lake.

(If necessary, your local soil conservation district office can be helpful for this information.)

FOR ERADICATION OF FISH SUCH AS SUNFISHES, GIZZARD SHAD, CARP MINNOWS, AND SUCKERS, APPLY FINTROL-5 ACCORDING TO THE FOLLOWING TABLE:

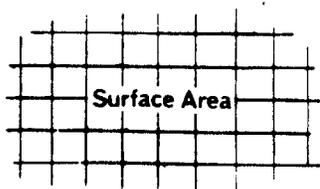
TABLE II: APPLICATION OF FINTROL-5

pH	8.5 or less	8.5 or less	8.5 or more	8.5 or more
Water Temp.(F.)	above 60°	below 60°	above 60°	below 60°
Antimycin A: in p.p.b.	5.0	7.5	7.5	10.0
FINTROL-5: in p.p.m.	0.5	0.75	0.75	1.0
FINTROL-5: grams per acre-foot	625.0	937.5	937.5	1250.0
FINTROL-5: pounds per acre-foot	1 lb., 6 oz.	2 lb.	2 lb.	2 lb., 12 oz.

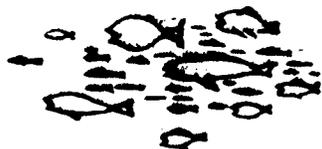
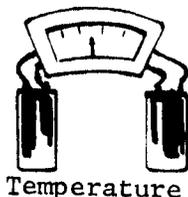
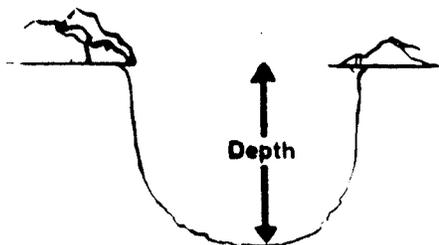
For example, 1 lb., 6 oz. of FINTROL-5 per acre-foot of water will be needed to eradicate green sunfish in a pond with a pH of less than 8.5 and an average temperature above 60°F. If there are 15 acre-feet of water to be treated under the same conditions, a total application of 20 lb., 10 oz. of FINTROL-5 is therefore required.

CAUTION

If pesticides are handled or applied improperly, they may be injurious to humans, domestic animals, desirable plants, and fish or other wildlife; and they may contaminate water supplies. Use pesticides only when needed, and handle them with care. Follow the directions and heed all precautions on the container label.



X



Species of Fish

Your pond has _____ acre-feet of water. _____ gallons of _____ formulation of rotenone would be needed, or _____ pounds of Fintrol.