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UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE BUREAU OF SPORT FISHERIES AND WILDLIFE Branch of Fish Hatcheries

Fishery Leaflet 190

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See Kernein file

TURTLE TRAPPING

The indiscriminate destruction of turtles should be discouraged, as they may be beneficial as well as detrimental to man's interest. Studies have shown that turtles, in general, are not harmful to wildlife, except perhaps at waterfowl sanctuaries and at fish hatcheries, and in these areas the turtles can be controlled. In a local situation, as in a pond, the turtles should not be exterminated until it has been demonstrated that they are undesirable.

Studies have shown that plants, crayfish, carrion, insects, and other minor items form the major portion of the foods taken by all species of turtles. The painted turtle, or the common pond turtle, lives almost entirely upon such foods. The snapping turtle's diet may include a much larger portion of fish, possibly as much as 70 percent, but this varies under different conditions and may be as low as 18 percent.

In a farm pond, turtles undoubtedly compete with fish for food such as crayfish and insects. On the other hand, the turtles provide valuable janitorial service by killing diseased or weakened fish, and by cleaning up dead or decaying fish and other animals. Moreover, the turtles provide excellent food for man and therefore may be regarded as part of the crop in the pond.

Before any method described here is employed for collecting turtles, conservation authorities for the area in which it is to be used should be consulted as to its acceptability, as some States have laws regulating the trapping of turtles.

The best places for turtle trapping are in the quiet water areas of streams and ponds, in the shallow water of lakes, preferably over soft bottoms, near water lilies or weed beds.

The seasons for trapping are spring, summer, and early fall. Through the remainder of the year, except in the "deep" South, turtles hibernate. During this time they probably do not feed, making trapping ineffective.

To conserve the smaller turtles, it is recommended that the mesh of traps be not smaller than 3 inches.

Snappers and Soft-Shelled Turtles

While the snapping turtles are in hibernation, they can often be taken in quantity from spring holes and old muskrat holes, under old logs, and in soft bottoms of waterways under the ice. Turtle collectors rely upon their hunting instincts and experience to locate hibernating turtles. When one is found, it pays to explore the surrounding area carefully because snappers often hibernate together. The method of capture employed, known as "noodling," requires a stout hook. One end of an iron rod is bent to form a hook and sharpened; the other end of the rod is used for probing into the mud or soil to locate the turtles. The hunter probes about in the bottom mud until he locates a turtle (which feels much like a chunk of wood) and then pulls it but with the hook. Turtles are inactive during the winter and offer little resistance to capture, although the landing of large ones may prove to be difficult even for experienced hunters.

Snappers and soft-shelled turtles are sometimes taken on set lines baited with cut fish or other fresh meat. One such device that has been recommended is hade by tying 4 or 5 feet of line to a stout flexible pole 6 to 8 feet long, and then placing about 12 inches of steel wire (No. 16) between the line and the hook (preferably a stout hook about 1 inch across between barb and shaft). The end of the pole is pushed into the bank far enough to make it becure and at an angle that will fish the bait a few inches above the bottom.

Snappers and soft-shelled turtles may also be taken readily in baited fyke or hoop nets (Figure 1). These barrel-shaped traps may sometimes be purchased on the market or they may be made from 3-inch square mesh of Humber 24 linen seine twine. The length of the trap should be from 4 to 6 feet from front to back hoop. Three to five hoops per trap, 30 inches in diameter, made of wood or 6-gauge steel wire with welded joints, may be used. The funnel-shaped mouth should be 18 inches deep from front hoop to the opening inside. The entrance opening of the funnel is 1 inch by 20 inches. The corners of the opening are tied by twine to the middle hoop. The rear or "box" end may be closed with a purse string. The net, after the hoops have been installed mould be treated with a preservative of tanbark, copper cleate, tar, or asphalt. To keep the trap extended, stretchers of wood or steel wire, about 9 gauge or larger, are fastened along each side.

Coarse mesh poultry wire may be substituted for the twine. If this is done the frame will be approximately 30 inches square. The shape and dimensions of the entrance as specified should be the same in all traps, as it is easily negotrated by the turtles. The dimensions of the trap may be altered for ease of transportation. A door may be installed in the top to facilitate baiting and removal of turtles. Entrance funnels may be placed on each end if desired.

One writer recommends baiting the trap with fish or fish heads, chicken entrails, or other juicy animal remains. These baits should be fresh, as snapping or soft-shelled turtles may not be attracted by spoiled food.

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Natermelon rinds are said to be good bait for soft-shelled turtles. The bait should be placed in a tin can fitted with a lid and perforated with holes to permit the juices to exude into the water. The can is hung in the middle of the trap. This method of baiting lengthens the time of usefulness of the bait, as it cannot be eaten by the first turtle trapped.

Turtle traps should be set with the tops of the hoops just out of the water; this will permit the turtles to obtain air and lessen their struggles to escape, and other turtles will enter the trap more freely. It is necessary to set traps this way if the turtles are to be taken alive. Traps set in streams must be anchored. If the water is too deep for the top of the trap to be out of the water, short logs can be lashed to each side to float the trap. The mouth should be set down-stream, as turtles enter more readily when it is set in this position.

Painted Turtles and Cooters

Because of their habits, the manner of capture of the cooters is different from that of the snapping and soft-shelled turtles. Cooters cannot be taken in numbers during the winter, as snappers are, because they do not congregate in their hibernating places. Neither do they respond as readily to baiting as the snapper and soft-shelled turtles. In the summer cooters are gregarious, crowding together in numbers on projecting logs and banks. By taking advantage of this fact, the "basking" species may be taken by sinking a box in a place turtles are using. The turtles crawl upon the top side of the box to "bask" in the sun and many of them manage to fall into the trap (Figure 2).

The top frame of the box may be constructed from discarded telephone poles, imperfect ties, or logs about 8 inches in diameter. Old natural unpainted wood is preferred. The logs are mitered at each end to fit together and make the inside enclosure 2 to 3 feet square. About half of each log from the top center to the inside under center is lined with zinc or galvanized metal. From the outside water edge to the top of each log, cleats can be nailed or the logs made rough, so turtles can easily climb on top. Galvanized wire with a mesh of 1 inch if all sizes, or of 3 inches if only larger turtles are desired, can be used to form a wire basket fitting the opening between the logs. Staples, hooks, or wire may be used for fastening the basket to the logs. Some trappers prefer to use bait; others leave the traps unbaited. Turtles that have dropped into the trap are unable to climb over the zinc or galvanized metal covering. The trap should be fastened to a stump or some other permanent anchor. For the capture of snapping and soft-shelled turtles, the trap could be modified by installing funnel-like entrances on one or two sides as described for the hoop traps.

Another type of trap consists of a box with an inclined board for a slide leading up to it. The turtles climb up the slide to bask and drop off into the box. Figure 3 shows the same trap with pivotal boards so placed that turtles crawling out on the boards overbalance on the terminal end and are dropped into the box.

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Care of Trapped Turtles

The traps should be visited daily. If they have been properly set, the turtles which are caught can get air and will remain alive. If you are interested in turtle conservation, you will free the small ones to grow larger. The larger ones may be carried home in a moist burlap sack. They may be placed in a tub, tank, or live box and kept for several days. Only 2 or 3 inches of water are needed. The turtle may be fed on table scraps, both animal and vegetable. Care should be taken to keep the tank in a sanitary condition, as the water may foul badly from particles of food unless cleaned regularly or replenished by a constant supply of fresh water.

Preparing and Cooking Turtle Meat

The first task in cleaning the turtle is to chop off its head and feet so it can neither bite nor claw you. To chop off the snapper's head, let it snap at a stick. The turtle will hold on tenaciously and the head can be readily pulled forward. The heads of the other species may be made to protrude by applying pressure with the foot to the back or upper part of the shell. Sometimes the nead can be made to protrude by lifting the tail and hind legs off the ground. After the head and feet have been removed, if the turtle is large, nail it to a post or other object, belly out. Cut along the shell around each of the four limbs and pull the skin over each leg. The belly shell of snapping and soft-shelled turtles may be separated from the back shell by cutting through the suture between the two with a knife. If the incision is made in the right place, the two shells are easily separated. After the bridges are cut, the belly-plate may be removed by carefully cutting it away from the meat underneath. A natchet or meat saw may be used to part the upper and lower shells of other turtles. The entrails are removed, and the quarters may be easily obtained by cutting to disjoint them from the shell. The tail and neck should also be skinned out. If the turtle is large, the ribs can be cut with a hatchet and the tenderloin removed from the "ceiling" of the upper shell. One turtle thus provides eight fine sections of meat: the four quarters (dark), and neck, tail, and two tenderloins (light).

As the fat is very gamey in flavor, this should be removed at once from all portions of meat. The meat may then be cooked directly or be soaked overnight in salt solution strong enough to float an egg. Some cooks like to add a tablespconful of vinegar per quart of salt solution. If it is soaked in salt water, the meat must be washed before being cooked. In either case, no parboiling is necessary.

When properly prepared, turtle meat is fine textured and resembles good beef. The meat may be served in a number of ways:

<u>Soup</u>.--Use the meat as a basic stock. Some epicures use the scalded shells (after flipping off the horny plates) and the bones with attached meat fragments.

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<u>Fried</u>.--Brown the meat in fat and butter. Pour off grease, season with salt and pepper, add a few bits of onion and enough water to cover, and simmer until the flesh begins to fall from the bones. Serve hot or cold with relishes, potato chips, and a dry wine.

Roll the meat in flour seasoned with salt and pepper, and sear well in deep fat. Pour off all but a small amount of fat, add three-quarters to a cupful of water, cover, and simmer for about 2 hours or until chunks of the meat fall from the bones. Or, put the seared meat and half a cupful of water into a pressure cooker, and cook for 25 to 30 minutes at a pressure of 15 pounds.

<u>Cutlet</u>.--Pound lean, boned turtle meat like cube steak, dip into egg batter, roll in meal and fry in hot fat.

<u>Curry</u>.--Cube a pound of turtle meat and brown in butter with diced onions. Add diced potato, carrot, salt, pepper, and a half teaspoonful of curry powder. Simmer in a small amount of water until meat is tender. To serve, pour over molds of cooked rice.

Suggested Reading

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FIGURE 2. -SINK BOX TURTLE TRAP.

