

## INTRODUCTION

Chinook salmon were stocked in the northern end of Lake Michigan (Antrim, Charlevoix, and Emmet counties) in the early phase of the salmon program, 1970 to 1976; however, no more chinook were added until 1983, when the Jordan River (Antrim County) was planted. It was subsequently decided that large numbers of Pacific salmon were undesirable in this river and the planting location was moved to Medusa Creek (Charlevoix County) beginning in 1984. An average of 337,526 spring fingerling chinook have been planted annually in Medusa Creek for the past 4 years (Table 1).

Medusa Creek is a small, man-made stream that is a tributary to northern Lake Michigan in Charlevoix County. Its flow is due to the operation of one to three pumps used to drain the limestone quarries of the Medusa Cement Company. This stream was chosen because (1) it was located in a good area for a salmon lake fishery and (2) because large numbers of returning surplus salmon could be controlled due to its small size and private ownership. All of the salmon that run Medusa Creek in the fall are harvested by and sold to a private contractor. An agreement exists between the private contractor and Medusa Cement Company for the use of the harvest site.

The location of the salmon blocking weir and harvest operation is approximately 150 feet upstream of the creek mouth. The harvest site was constructed in the fall of 1986 by a private contractor. A permanent harvest pond was dug adjacent to the creek, with an inlet at the upstream end to divert a portion of the creek flow through the pond and a fish ladder at the downstream end to allow passage of salmon into the pond (Figure 1). During fall harvest operations, a temporary wood rack weir is installed in the creek to prevent the salmon from migrating further upstream and to force them into the harvest pond.

Salmon harvest operations on Medusa Creek began in 1986. Few salmon returned in 1986, as would be expected since stocking at this location only began in 1984. An estimated 1,500 chinook salmon weighing 14,676 pounds were harvested during the period October 3 to November 7, 1986 (M. Shouder, unpublished data, Michigan Department of Natural Resources, Newberry).

## HARVEST WEIR OPERATIONS, 1987

The harvest pond was filled and the blocking weir was installed during the second week of September. The harvest operation was completed on November 10, resulting in a total harvest season of 62 days. The salmon were harvested by Tempotech Industries personnel and all salmon were sold to this contractor. Fisheries Division personnel were on-site during harvest operations to monitor the harvest and collect biological data.