Alberta Conservation Association 2022/23 Project Summary Report

Project Name: Fish Stocking Expansion – Channel Catfish Ponds

Fisheries Program Manager: Peter Aku

Project Leader: Mike Rodtka

Abstract

Roughly one quarter of all fishing efforts in Alberta is sustained by trout stocking, and demand for recreational angling opportunities in the province is high. To help meet demand, millions of hatchery-reared trout are stocked annually into 300 Alberta lakes, reservoirs, and ponds. The stocked trout are cold-water species and require cool, oxygen-rich environments to thrive. High summer water temperature and low dissolved oxygen stresses trout and increases mortality such that some of Alberta's stocked waterbodies are incapable of supporting trout survival beyond mid-summer. For stocking to be successful at these waterbodies, an alternative to trout is required. Following a detailed evaluation of the suitability and availability of commonly stocked sport fish by Alberta Conservation Association (ACA) in 2020/21, a channel catfish x blue catfish (*Ictalurus punctatus* x *I. furcatus*) hybrid was selected as the most promising alternative. Catfish of the genus *Ictalurus* do not currently occur within Alberta so their stocking to provincial waterbodies required careful consideration. To assist in the evaluation, we completed a detailed review of the biology, ecology, management, and culture of catfish in North America. In 2021/22, we continued to gather information in support of the evaluation as requested by provincial managers. The evaluation was completed in 2022/23 and included assessing ecological risk, as well as consideration of the management and social implications of stocking catfish. Although the final decision rested with the Government of Alberta, ACA participated in the review and was conditionally approved for the introduction of sterile hybrid channel catfish to Alberta in August 2023. However, after careful assessment of the logistical and financial challenges associated with meeting the conditions of approval, we decided to not proceed with importation.

1

Introduction

Roughly one quarter of all fishing efforts in Alberta is sustained by trout stocking, and demand for recreational angling opportunities in the province is high. To help meet demand, millions of hatchery-reared trout are stocked annually into 300 Alberta lakes, reservoirs, and ponds. The stocked trout are cold-water species and require cool, oxygen-rich environments to thrive. High summer water temperature and low dissolved oxygen stresses trout and increases mortality such that some of Alberta's stocked waterbodies are incapable of supporting trout survival beyond mid-summer. For stocking to be successful at these waterbodies, an alternative to trout is required. Following a detailed evaluation of the suitability and availability of commonly stocked sport fish by Alberta Conservation Association (ACA) in 2020/21, a channel catfish x blue catfish (*Ictalurus punctatus* x *I. furcatus*) hybrid was selected as the most promising alternative. Catfish of the genus *Ictalurus* do not currently occur within Alberta so their stocking to provincial waterbodies required careful consideration. To assist in the evaluation, we completed a detailed review of the biology, ecology, management, and culture of catfish in North America. In 2021/22, we continued to gather information in support of the evaluation as requested by provincial managers. The evaluation was completed in 2022/23 and included assessing ecological risk, as well as consideration of the management and social implications of stocking catfish. Although the final decision rested with the Government of Alberta, ACA participated in the review and was conditionally approved for the introduction of sterile hybrid channel catfish to Alberta in August 2023. However, after careful assessment of the logistical and financial challenges associated with meeting the conditions of approval, we decided to not proceed with importation.