

**Alberta Conservation Association**  
**2021/22 Project Summary Report**

**Project Name:** Fish Stocking Expansion – Channel Catfish Ponds

**Fisheries Program Manager:** Peter Aku

**Project Leaders:** 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 detailed evaluation of the suitability and availability of commonly stocked sport fish 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 requires careful consideration. To assist managers in their evaluation, we completed a detailed review of the biology, ecology, management, and culture of catfish in North America in 2020/21; and we contracted subject matter experts at the University of Mississippi to assess pathogen transmission risk. We continued to gather information in support of the evaluation as requested by provincial managers in 2021/22. In addition to assessing ecological risk, the evaluation includes consideration of the management and social implications of stocking catfish as well. If approved, we anticipate importing sterile (i.e., non-reproductive) catfish fry, which would then be reared in a quarantine facility for several months prior to experimental evaluation of fish performance in a more natural setting.

## Introduction

Roughly one quarter (25%) of all fishing effort 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 into 300 Alberta lakes, reservoirs, and ponds, annually. The trout stocked are coldwater 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 detailed evaluation of the suitability and availability of commonly stocked sport fish 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 requires careful consideration. To assist managers in their evaluation, we completed a detailed review of the biology, ecology, management, and culture of catfish in North America in 2020/21 and contracted subject matter experts at the University of Mississippi to assess pathogen transmission risk. We continued to gather information in support of the evaluation as requested by provincial managers in 2021/22. In addition to assessing ecological risk, the evaluation includes consideration of the management and social implications of stocking catfish as well. If approved, we anticipate importing sterile (i.e., non-reproductive) catfish fry, which would then be reared in a quarantine facility for several months prior to experimental evaluation of fish performance in a more natural setting.