

**Alberta Conservation Association
2023/24 Project Summary Report**

Project Name: Sturgeon River Wetland

Wildlife Program Manager: Doug Manzer

Project Leader: Lance Engley

Primary ACA Staff on Project: Lance Engley, Kris Kendell, Garret McKen, and Terri Perron

Partnerships

Lac Ste. Anne County

Key Findings

- We conducted wildlife surveys on the Sturgeon River Wetland Property, a 58-hectare site located in Lac Ste. Anne County, recording a total of 31 species, comprised of two amphibians, 23 birds, and six mammals.
- We recorded an additional 11 wildlife species just across the property line where the habitat is more diverse and not subject to livestock grazing pressure.
- We completed a riparian health assessment on five reaches of the Sturgeon River that flows through the Sturgeon River Wetland Property, with health scores ranging from 41% (unhealthy) to 93% (healthy).
- We believe that limiting livestock access to the riparian area, planting native vegetation, and reconnecting oxbows would improve the ecological integrity, water quality, and terrestrial and aquatic habitats on the Sturgeon River Wetland Property.

Details

Wetlands and riparian areas are integral components of healthy ecosystems, providing habitat for a diverse range of species and acting as natural filters for contaminants in runoff. Wetlands and riparian areas also play a critical role in flood mitigation, helping slow and store surface runoff before slowly releasing it back into waterways. These habitats are as important as they are

sensitive and can be lost or damaged as a result of agricultural and forestry activities, oil and gas exploration, and rural and urban development.

Alberta Conservation Association and Lac Ste. Anne County have partnered to collect baseline data on the Sturgeon River Wetland Property, a 58-hectare parcel of land situated along the Sturgeon River. The goals of the project are to restore the shoreline and wetland function, improve water quality, and enhance wildlife and fish habitat. To monitor improvements to habitat quality over time, we collected baseline data on the presence of amphibians, mammals, and birds. We also completed riparian health assessments on the section of the Sturgeon River that flows through the Sturgeon River Wetland Property.

Our surveys found 31 wildlife species utilizing this property, including two species of amphibians, 23 species of birds, and six species of mammals. Much of the property had low habitat diversity and structure, and relatively few trees and shrubs, limiting the variety of species found on the site. In contrast, we made incidental observations of an additional 11 species of birds that were not documented within the property, but were recorded in a black spruce, birch, and willow forest in the area just across the property line from the site, indicating that an increase in habitat diversity within the property may enhance its biodiversity.

Riparian health assessments conducted over the five reaches of river within the property returned health scores ranging from 41–93%, with an average score of 72% (healthy with problems). Riparian scores for each reach were well correlated with grazing pressures on the property, with more grazing pressure leading to degradation of habitat and lower riparian health scores.

Based on the data collected in 2023, we recommend improving the condition of habitat within the Sturgeon River Wetland Property and in turn, the Sturgeon River itself, by limiting livestock access to the riparian areas, planting native vegetation, and reconnecting oxbows.

Photos



Photo 1. Aerial view of the Sturgeon River Wetland Property. Photo: Garret McKen



Photo 2. Wood frog eggs on the Sturgeon River Wetland Property. Photo: Kris Kendell