



# ABMI Species Profile Series

## American Starburst

### *Imshaugia placorodia*

Conservation Status: AEP - Sensitive | SRANK - S3S5

Taxon data collected: 2003 - 2019

Data Summary: Forest

## Introduction

Over its decade-plus of operations, the ABMI has generated a comprehensive dataset on Alberta's species, their habitats, and the extent and type of human footprint across the province. With this information, the ABMI has developed analyses to predict species' relative abundances and examine species' responses to vegetation and soil types, as well as human footprint in Alberta. These methods have been applied to hundreds of species; this profile provides summary results for one.

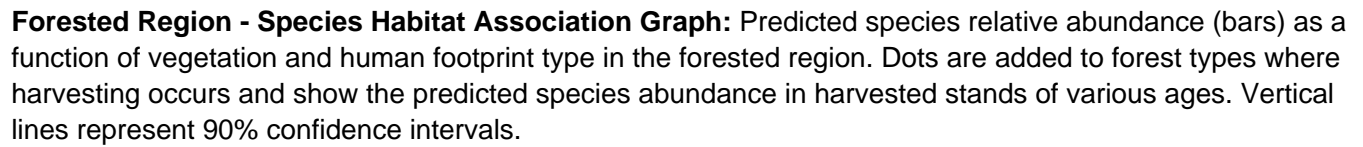
There are three main results sections in this species profile. The first section summarizes what vegetation, soil, and human footprint types the species uses in Alberta. Next, the data are used to identify which land use activities have the biggest impact (positive or negative) on the species' relative abundance. Finally, a series of relative abundance maps illustrate the species' predicted distribution under current and reference conditions, and where it's expected to have increased or decreased as a result of human-caused changes to its habitat.

The target audiences for species profiles are resource managers in Alberta. Summary data can be used to support land-use planning and mitigate the risks of development on a species of interest. While developed to support resource management, these species profiles are also of wider interest to anyone wanting information on species that live in Alberta, what habitats they are found in, and how our land use affects their populations.

Please note that the results are predictions based on the best available data at the current time. All results must be considered with caution; interpretation caveats are presented with each result. As with any statistical model, our confidence in the modelled outputs will increase as we gather more data and refine our models; to that end we update the summary results annually based on new data. As an internal check, for species with additional information in the literature, we examine whether our models produce ecologically meaningful results. For data-poor species, our predictions are the first contribution towards developing an understanding of the species' ecology.

**Please refer to the [ABMI Species Website Manual](#) for a complete description of methods and limitations associated with the analyses included in this species profile.**

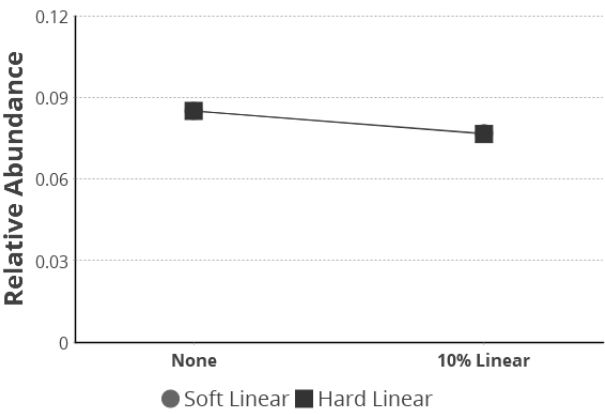
## Species-habitat Associations in the Forested Region



# Relationship to Linear Footprint



## Relationship to Linear Footprint in the Forest Region

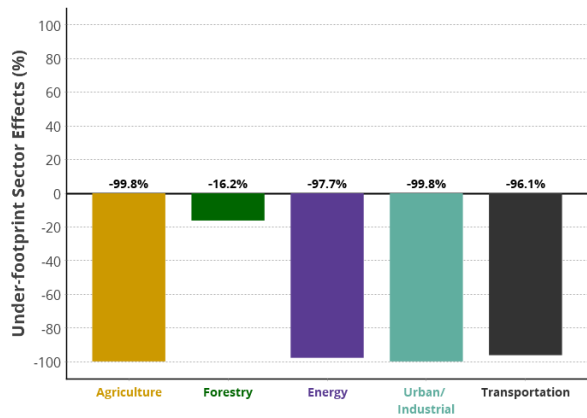


**Linear Footprint Graph:** Species relative abundance predicted for habitat with no human footprint compared to habitat in which 10% of the area is converted to either soft or hard linear footprint.

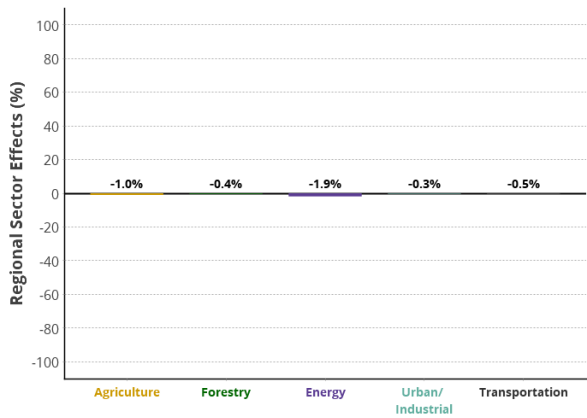
# Impacts of Human Footprint

## Human Footprint Effects in the Forested Region

Under-footprint Sector Effect



Regional Sector Effect



## Predicted Relative Abundance

### Reference Conditions

- The reference condition shows the predicted relative abundance of the American Starburst after all human footprint had been backfilled based on native vegetation in the surrounding area.

### Current Conditions

- The current condition is the predicted relative abundance of the American Starburst taking current human footprint (circa 2012) into account.

### Difference Conditions

## References & Credits

### Data Sources

Data collected by ABMI.

### Recommended Citation

Alberta Biodiversity Monitoring Institute. 2020. American Starburst (*Imshaugia placorodia*). ABMI Website: [abmi.ca/home/data-analytics/biobrowser-home/species-profile?tsn=99002241](https://abmi.ca/home/data-analytics/biobrowser-home/species-profile?tsn=99002241).

### Additional ABMI Resources

Alberta Biodiversity Monitoring Institute. 2016. ABMI Species Website Manual, Version: 2016-12-02. Alberta Biodiversity Monitoring Institute, Alberta, Canada. Report available at: [abmi.ca](https://abmi.ca).

Alberta Biodiversity Monitoring Institute. 2014. Manual for Species Modeling and Intactness, Version 2014-09-25. Alberta Biodiversity Monitoring Institute, Alberta, Canada. Report available at: [abmi.ca](https://abmi.ca).

Alberta Biodiversity Monitoring Institute. 2014. Terrestrial field data collection protocols (abridged version) 2016-05-18. Alberta Biodiversity Monitoring Institute, Alberta, Canada. Report available at: [abmi.ca](https://abmi.ca).

Download [ABMI Species and Habitat Data](#).

View [ABMI Collaborations](#).