

## Zoology Program Strategic Framework for July 2020 through June 2025



### **Purpose**

The Zoology Program is the state's source for reliable information and expertise to support stewardship of Montana's animal species, emphasizing those of conservation concern. We strive to provide easy access to that information in order for users to save time and money, speed environmental reviews, and inform decision making.

### **What we Value**

- Working with our partners to acquire comprehensive information to meet program needs
- Maintaining current information on Montana's animal species
- Being responsive to the information needs of our partners.
- Providing neutral, trusted, timely, and equitable service to all of our information users.
- Transparency to our data users in setting work priorities and providing information products.

### **Our Roles**

- Acquire information on Montana's animal species including distribution, life history, biology, ecology, habitat associations, and conservation status.
- Identify gaps in our current information resources and work to fill them by leveraging partnerships with agencies, academic researchers, and other partnering organizations.
- Provide authoritative information on the status, distribution, life history, biology, and ecology of animal species through online tools, presentations to professional and non-professional audiences, and reports and other publications.
- Collaborate with the Botany, Ecology, and Information Services programs on data acquisition and management when opportunities arise.

## Strategic Result 1

### What we will do:

Collect observation and structured survey data

### How we will do it:

- Work collaboratively with partners to identify and develop projects that address gaps in sampling and the knowledge of species' distributions
- Work collaboratively with partners and others conducting structured surveys to centralize these data into MTNHP databases
- Work to acquire incidental animal observations
- Prioritize acquisition of survey and observation data for Threatened and Endangered Species, Species of Conservation Concern, Potential Species of Conservation Concern, USFS Sensitive and Species of Concern, BLM Sensitive species, FWP Species of Greatest Conservation Need, and species with little data that may be rare or threatened
- Prioritize collection of information from areas that lack baseline surveys or are otherwise under-surveyed

### Why we will do it:

Survey and observation data are the basis for determining range, occupancy, habitat associations, and habitat suitability for individual species. All of this information allows resource managers to make informed decisions in local and regional environmental planning and permitting process.

## Strategic Result 2

### What we will do:

Acquire information on taxonomy, distribution, occurrence, biology, and ecology of Montana's animal species

### How we will do it:

- Compile zoological literature, websites, and other references
- Identify associations between ecosystems and animal species
- Acquire, attribute, and display photos of animals to aid in identification of species and subspecies
- Ensure that taxonomy is consistent with the latest nomenclature provided by science committees, other taxonomic authorities, and NatureServe
- Create range polygons from observation data and expert opinion
- Collaborate with Information Services staff to model predicted habitat suitability and create Species of Concern Occurrences

### Why we will do it:

Users are able to make informed and timely decisions because they have common access to comprehensive, current, and accurate information on Montana animal species from a single trusted source.

### **Strategic Result 3**

#### **What we will do:**

Maintain conservation status rankings for animal species

#### **How we will do it:**

- Use program data and data products, information from literature and other primary sources, expert opinion, and NatureServe's conservation status ranking criteria to calculate conservation status ranks for animal species
- Develop and maintain a database to facilitate the aggregation of rank component data and consistent and timely updating of conservation status ranks
- Lead the Species of Concern Committee and Montana Chapter of the American Fisheries Society Species of Concern Committee in the calculation and evaluation of conservation status ranks for species
- Ensure that conservation status ranks and ranking criteria provided through online tools and data requests is current, accurate, and fully documented

#### **Why we will do it:**

Species will be appropriately prioritized for management actions during regional and project-level planning and permitting efforts.

## Strategic Result 4

### What we will do:

Present information to partners and incorporate partner feedback to direct future work and refine products.

### How we will do it:

- Distill information from the scientific literature and data in the MTNHP information system to create and maintain species accounts on the Montana Field Guide.
- Respond to requests for expertise in a timely and thorough manner.
- Produce informative products to increase awareness of animal species found in Montana, including posters, reports, publications, and presentations for professionals and the general public
- Develop technical and non-technical morphological keys to aid in identification of species
- Participate in, and provide leadership to, professional committees and working groups
- Increase awareness of MTNHP and its core mission by attending and presenting at professional society meetings and meetings sponsored by partner organizations
- Actively solicit feedback on potential improvements to datasets, online tools, and other products
- Participate in the annual partners meeting

### Why we will do it:

Making our data readily accessible and working to improve our products with partner feedback ensures that our information can be readily used in regional and local planning and permitting efforts.