

GiSRT Workshop – 23 May 2022

The Role of Genomics in Fostering and Supporting Biodiversity: Implications for Wildlife Management, Policy and Indigenous Food Security

Workshop Leads

Maribeth Murray, Arctic Institute of North America
Srijak Bhatnagar, Athabasca University
Amy Chabot, Queens University/African Lion Safari
Ikaarvik

Workshop Goals

1. Participants learn the fundamentals of genomics, how genomics as a “tool” works, what kind of questions genomics can help to address, potential applications for environmental monitoring, strengths, shortcomings, etc.
2. Explore questions and concerns participants might have about genomics.
3. Explore what kinds of information participants might need to address their questions and concerns.
4. Begin to identify local, and culturally relevant and appropriate ways of describing genomics research and ways in which genomics tools might be used to support Indigenous community objectives around wildlife, and environmental monitoring.
5. Begin planning of species inventories wherein participants work toward agreement on the purpose of the inventories, a plan for long-term sustainability and updating of inventories beyond this project, the full scope of what to include and level of detail, data sharing protocols and agreements, and attributes to describe data sets. Focus on end user needs (i.e., what should inventories contain to meet the different needs? Where is the overlap? Where is there divergence?).

Agenda

- 9:00 – 9:10 am Territorial Acknowledgement and Intro to Project
Maribeth Murray
- 9:10 – 9:20 am Group Introduction
- 9:20 – 9:45 am Introduction to genomics for non-specialists
Srijak Bhatnagar
- 9:45 – 10:30 am Role of genomics in environmental monitoring and conservation
Amy Chabot
- 10:30 – 10:45 am **Break**
- 10:45 – 12:15 pm Breakout 1 – Address Goals 2 and 3
Explore questions and concerns participants might have about genomics and what kinds of information participants might need to address their questions and concerns
- 12:15 – 1:15 pm **Lunch**
- 1:15 – 1:30 pm Status of genomics research on Canadian wildlife
Maribeth Murray/Srijak Bhatnagar
- 1:30 – 2:00 pm Genomics Case Study
Lila Colston-Nepali
- 2:00 – 3:30 pm Breakout 2 – Address Goal 4
Identify local, culturally relevant, and appropriate ways of describing genomics research and ways in which genomics tools might be used to support Indigenous community objectives around wildlife, and environmental monitoring
- 3:30 – 3:45 pm **Break**
- 3:45 – 4:00 pm Sequencing Life – Canada BioGenome Project
- 4:00 – 5:00 pm Breakout 3 – Address Goal 5
Begin planning of species inventories wherein participants work toward agreement on the purpose of the inventories, a plan for long-term sustainability and updating of inventories beyond this project, the full scope of what to include and level of detail, data sharing protocols and agreements, and attributes to describe data sets with a focus on end-user needs (i.e., what should inventories contain to meet the different needs? Where is the overlap? Where is there divergence?).