How do Wildlife Cross the Road? Ask the people who live there!

*Tracy Lee and Danah Duke, Miistakis Institute*

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What is the problem?

1. All wildlife need to be able to move freely throughout their habitat to access water, food, and mates.
What is the problem?

2. When highways are built through habitat, wildlife must find ways to cross.
What is the problem?

Sometimes vehicles collide with crossing wildlife. These collisions are unsafe and very costly.
What is the problem?

When highways are built or widened, this fragments wildlife habitat and increases the risk of wildlife-vehicle collisions.
What is the solution?
Why Citizen Science?

- Genuine data gap
- Issue citizens are concerned about
- Community support needed to justify investment
Citizen Science Programs

Road Watch in the Pass
Collision Count
Pronghorn Xing
RoadWatchBC
Contributed to Decision Making

- Contributed dataset to inform location of mitigation
- Built societal support for AT investment in mitigation
- Lead to conservation action – AT invested in mitigation
- Advanced the field of road ecology – policy change
Highway 3 Journey
Road Watch in the Pass

- 5,000 observations of wildlife on highway
- Data set contributed Hwy 3 report, which outlined nine mitigation sites for consideration
- Cost benefit model of AVC vs. mitigation investment
- Pressure on AT to take action via letter writing and local outreach
Collision Count
Collision Count

- 1052 transects walked since 2014
- 60 carcasses reported off of right of way
- Evaluation of mitigation
- 41 carcasses reported by highway maintenance contractor
- Correction factor 1.5 multiplier on roadkill data (used in latest AT RFPs)
RoadWatchBC is Catchy!

- Used by Idaho Fish and Game for 6 months to test the value of smartphone application data collection system
- More records (>600 in first 6 months compared to previous five years collected by IDOT)
- Idaho department of transportation developing their own program
Lessons Learned

➤ All programs had intended conservation outcome
➤ CitSci not a silver bullet – but can play a significant role
➤ Engage decision makers earlier in process
➤ Information presented or translated in a way that is helpful to decision maker
➤ Scale of data matches the scale of the decision being made