

## **Meeting Minutes**

Recorded by Ginger Elliott & Evan Metler – African Lion Safari

**Date of meeting: September 9th, 2022**

**Who attended the meeting? What CAZA institute are they from?**

1. Amy Chabot - African Lion Safari
  - a. Evan Metler
  - b. Ginger Elliott
2. Stephen Petersen - Assiniboine Conservancy (presenter)
  - a. Elise Hampshire - Assiniboine Conservancy
3. Katie Machonen - Ripley's Aquarium
4. Angie Denis - Science North
5. Donnell Gasbarrini - Toronto Zoo
6. *Jessica Steiner - Wildlife Preservation Canada*
7. Jonah Millar - Greater Vancouver Zoo Education
8. Kendra Ross - Safari Niagra
9. Cathy Mitchell - Riverview Park and Zoo
10. Vicky Carriere - Parc Omega
11. Catherine S - Edmonton Valley Zoo

**Contact information for main speaker:**

- Stephen Petersen, Director of Conservation Research, Assiniboine Park & Conservancy, SPetersen@assiniboinepark.ca

**Reminders:**

- The Sharepoint library is open and access has been given to your institution. If you have any problems please contact: Donna Lahey: donna@promaxistraining.com
- Please sign-up for a meeting to present your facility's conservation efforts: <https://docs.google.com/spreadsheets/d/12E9HRixI7DUTC-pKjs5duTOd122nTCX6/edit?usp=sharing&oid=109353037694980929168&rtpof=true&sd=true>
- The 2022 CAZA Conference will be hosted by BC Wildlife Park in Kamloops, October 18 - 20, 2022 registration is now open.

**Meeting resources:**

## Assiniboine Datasheet

<https://docs.google.com/spreadsheets/d/1KNmnFSFqVbMcx3dHBclVvLfBYdJ2euDtsWEtRKLI04Y/edit#gid=0>

CPSG IMP Workshop report:

[https://drive.google.com/file/d/1H0Wbd4jevNRnUPRRo\\_YNxBUqoAi9LqAo/view?usp=sharing](https://drive.google.com/file/d/1H0Wbd4jevNRnUPRRo_YNxBUqoAi9LqAo/view?usp=sharing)

Recording:

<https://drive.google.com/file/d/19FP4bbjMLgEEiMySNxsvJSmC9GxXtFby/view?usp=sharing>

### **Meeting summary:**

*2:00pm* Meeting called. Brief hellos.

*2:50pm* Stephen Petersen, Director of Conservation Research, Assiniboine

Developed a conservation strategy with 3 main themes

1. Be an international leader of Arctic and Subarctic species conservation. The goal here is to contribute to conservation of northern species and ecosystems and take action against climate change.
2. Be a leader in Manitoba
3. Support and participate internationally
  - a. this is the area of potential for Manitoba
  - b. currently we don't actively go places

Research department formed in 2011 and currently has 4 full time permanent staff. Assiniboine has up to 3 conservation interns or field techs on one-year contracts, and up to 4 summer conservation assistants. Assiniboine also takes on students for BSc honors and Msc, International Polar Bear advisory board, Terrestrial Member Committee.

Assiniboine Conservation strategy divided into three themes. Theme 1: Be an international leader of Arctic and Subarctic species conservation. The goal here is to contribute to conservation of northern species and ecosystems and take action against climate change.

Manitoba Species and International Species focus. Northern, Manitoba, and International species focus is on Climate Change. Manitoba's focus is biodiversity.

Challenges in conservation are that large threats of climate change are difficult to tackle, and that the ecosystems are changing yet species are not in decline. Indigenous communities are not looking for southern involvement. Create information for others to use. Developing better field methods.

### **Polar Bear**

Hair growth project that involves numerous zoos, an example of animal care and research staff working together. No shortage of researchers interested, yet there is a limit on capacity for training. Sampling hairs and looking at how fast hair grows and is lost. Analyze diet, chemistry, contaminants. Looking to see how large of a molt the bear has and how fast it occurs. Working with polar bear international. Short term satellite tags. Internal design competition. Burr style tag lasted 24 hours due to aggressive grooming.

Internal Research Ethics Community structured as Canadian Council on Animal Care Committee with modifications for social science.

Polar Bear Denning - took gray literature to put together comprehensive? map that allows work on polar bear management plans. With that out there we are now looking more specifically in Manitoba where does current forest fire risk overlap with Polar Bear denning? Where is the risk of fire (which is likely to increase with climate change drying out peatlands) Can we make a map with a line in it, so if you're concerned about polar bear habitat, maybe prioritize fire management on this side of the line

### **Beluga Bits**

Few different aspects, taking underwater photos of Beluga. Done by Polar Bear International which coordinates for explore.org to upload animal recordings. 4 to 5 hours a day in July and August they drive around and live stream all that's there. We capture or viewers can capture snapshots. Now turning to collect all the video data. We sample all the frames, work with university students to develop an AI algorithm that will get rid of photos that don't have beluga, put that into Zooniverse, and then people around the world help to classify images which are then turned over to research projects.

23,000 Participants and 1,000,000 classifications. 2 publications and 2 successfully defended master theses. Essentially trying to collect an annotated database of beluga in the water that anyone can ask questions about.

Fat rolls manipulated by muscles allow them to move and maneuver appropriately through water.

Question: might be entered through photos and aging of animals. Are we seeing more disease over time? Are we seeing anthropogenic effects over time

### **Arctic Seals**

Churchill has Harbor and Ring seals in the Churchill area. We have published on Harbor seal populations. Ring seals are more challenging to survey. Ice adapted seals are believed not to be doing well. Increase in harbor seal population in correlation with sea ice. Trying to understand more about how Harbor seals use the Churchill river, in some rivers they will travel about 200 km inland which is rare for seals. Trying to tag seals (successful with 2) very challenging to do. We are continuing to try and understand how the species uses the specific river, partially as the area is a candidate for a national marine protected area. At the same time new investment in the railroad infrastructure may lead to shipping out of the Churchill. See Arctic Vets for more! Collaboration with MB Hydro, UManitoba, and Fisheries and Oceans Canada.

### **Closer to home**

Huge threats are climate change and habitat loss, it's a balancing act as we need to appreciate environmental concerns without affecting human livelihood. How to fit in the framework without making people angry or dissuading them to help. As these land-owners and land-holders are those that can manage their land in conservation focused ways and make big differences.

### **Grassland butterfly**

Threats include fragmentation and habitat loss i.e. tall grass prairie which has disappeared up to 99%. Working with 3 butterfly species: Poweshiek Skipperling, Dakota Skipper, Garita skipperling (surrogate species not at risk). Choose three sites that maybe aren't in opposite directions...

Poweshiek - Critically endangered found in Manitoba and Michigan (maybe one in Wisconsin? very unsure). Used to be common till early 2000's. Rapid population decreases got us to the current state.

Always a little surprised to still see them in the wild. Surveys at 24 sites, only found at 4, 3 of which are site Assiniboine does active release

Dakota Skippers - Endangered couple regions with populations in Manitoba. Don't have good data on population trends yet but we're doing that research now.

For these Powesheik specifically had an IUCN assessment which clearly identified ex situ needs for this species and identified need for ex situ role in Canada. We still very closely work with these international partners which has been a super advantage. All locations Powesheik currently reside are Nature Conservancy of Canada sites which allows us to ma

The emotional weight of saving species

### **Bird Strike Mitigation**

Bird strike work across facilities gathering data and performing mitigation. Bird windowing, several solutions have been introduced such as dots and sharpie lines. Mitigation was successful in QFC Patio as it was a high-fatality area. Collisions downs from 20 in 2018 to 2 in 2020 and 1 in 2021.

Getting mitigation in place is awesome, easier to bring into new buildings than to change old! Communication with staff, volunteers, members and on social media. We have tried almost every type of mitigation. Put up feather friendly, colidiscap, made or own devices, found black sharpie works the best for staying? If you have any methods of mitigation we would love to hear it and try it ourselves. Communication with staff, volunteers, members and on social media is critical to raising awareness and getting these efforts in place.

Working to move forward on cat work, however, people are VERY touchy on this subject. Through the North America SAFE program we have been looking at how we can provide habitat stewardship in the park. Thought about getting a banding permit, would be great but we currently have mostly mammal people. Other bird activities have included:

- Put up bird houses which are monitored for fledgling. 22 tree swallow young fledged since deployed in 2019.
- Chimney swift chimney implemented. Free standing chimney, first in Manitoba to work. Nesting pair in chimney, implementing chimney swift surveys. Recommended mitigation strategy when chimneys are taken down.
- Purple Martin Condo deployed in 2021, played calls, no Martins yet.
- Lots of swallows around the property trying to include them in a more comprehensive aerial insectivore program

### **International Work**

Fundraising and awareness for international species projects. Particularly for Snow Leopard Trust and Red Panda Network. Occasionally we donate to other large efforts, i.e. the Africa Wildfire Initiative where we had a donor match funding initiative. Initial reluctance to send money out of province. We do lean towards arctic and Manitoba species. There are possibly some really good opportunities.

Could this committee collate opportunities for each other in this area?

### **Evaluation of Opportunities** - could we get some input?

Google Doc which can be shared with folks, (*in resources*) to try and evaluate opportunities that come our way. It's to try and evaluate opportunities that come our way, essentially a spreadsheet that tries to force

you to score. I broke it down to alignment (with conservation strategy), impact, urgency and feasibility (so logistics).

Struggling and would like perspective and criteria on how to score these things without having missed or double counted things.

Largely developed from brainstorming, something similar in house for collection planning (red for stop green for go kind of thing). Made by the department considering their interactions with external and internal forces.

Considering zoo needs, like can we find funders? Which sometimes boils down to is it cute. Working in Burrowing Owl the question of how do we evaluate a program that already exists and we may not be the lead in the program. So I asked around, do people have some sort of similar framework? There were ideas but it was not formalized as this and tended to vary from institution to institution. SO IUCN (think it was Onnie) recommended people have to decide on priorities first and then decide on opportunities. That is why there is an extensive alignment section.

## Discussion

**Catherine:** Hi Catherine from Edmonton Valley, nice to meet you all. We are where you were in 2011 Stephen. This question you raise we are immediately grappling with as we don't necessarily have a strategic plan for conservation yet, but coming from a background in climate change (adaptation/mitigation) we have done a lot of risk matrix evaluations. If you're familiar, with a focus on Northern habitats and climate change it's making me think a risk matrix approach without the risk component would be a potentially good approach. Where one axis could be a consequence of not participating and the other is how does it align with your mission/strategies and if you can work within that?

**Amy:** I was thinking, looking at your scores, how would you make decisions amongst them? Does the whole department get together? Or is that you yourself?

**Stephen:** So this is my group but not the zoo, nested in animal care at a low level in the hierarchy of things. As a group we have discussed how we are gonna do this and how to make decisions. When I talk to Research and Conservation staff (who I consider the experts) and we figure out key points (how are we actually going to conserve something) then I move to convince others we know what we are talking about. There are some logistic things but business degrees should not make conservation decisions (?). There is an optics and funding potential component that takes precedence over actual need. For example I would love to do mussel work i.e. Maple Leaf Mussel, but they aren't pretty so there is push back as it's not a charismatic species. A struggle for everyone as we have competing priorities and someone has to pay us to do what we do.

**Jessica:** CPSG had tried a method for zoo to evaluate and prioritize field based programs, but from what I understood it didn't take off because each zoo has internal individual criteria. It may help to develop your scoring? There are a few appendixes that deal with risk and the consideration for what each is.

**Stephen:** That is very useful and yeah I may have missed on the excel when I ran through it but we have an assessment for field work through this method applied to our Poweshiek program. Which is a high intensity program which checks all the boxes, however the score was 75% so I assume something is wrong with calculation or considerations? Either criteria are weighted wrong or? We ran a couple opportunities through and they did score less than the one we are already in? So maybe we are getting close, which is fine and good but at some point we have to set a threshold.

**Amy:** When you say we go or wait do you mean internally you then go to the higher ups and say let's do this or?

**Stephen:** I have a base budget to defend every year, most of the way we run is grants and has been. So the zoo organization manages the people, animals and the facilities. But yeah a lot of what we do is through partnerships and grants to accomplish. So when I say wait when it's scoring high but not high enough because funding... that is our signal to start writing grants. Sometimes I know it will take 5 years to get something done, so we want to put up a Motus tower. We have most of the funding, most of the approval, but it will likely take another year, and we have already been hamoring on it for 2 years. As now we need engineering to put it on a building, but oh now we don't want that building; when it comes to infrastructure stuff I can guess as to if it will go ahead and what the timeline might be. So sometimes we have to wait to gather resources. Bird mitigation is a good example, I wanted to put the whole budget the first year to mitigation but instead we have done little bits over time, a strategy to the strategy

**Amy:** Maybe at the CAZA meeting, how does your research conservation department fit within your organization? Because we know how the keepers fit in but then we developed our priorities (like you within our own department) and then went to the boss here you go, but really I would like to be more integrated, so I am wondering how others face these challenges?

**Stephen:** Typically when I choose where to go to conferences it's to scientific not professional conferences and there is definitely a benefit I missed by not having those conversations. I have a conservation strategy now but it probably took 5 years to develop and the CEO said no, you need to consult with everyone. So back to the drawing board and going back it never got anywhere, back and forth occurs. It's a simple key guiding piece, incredibly hard to get sign off on and took a long long time within the organization. Every place is a bit different but getting together with interested and struggling folk, we have tried to create a conservation strategy so that all departments could see themselves and create measures in that strategy. We haven't done a great job of getting them on board but each year we try and make some inroads. For example we have a horticultural department. There are lots of opportunities for conservation strategies, so how do we find something that is high priority for them AND achieves conservation strategy? Some places we have done it better, maybe not us specifically but keen folks in those departments i.e. our education team with climate change and biodiversity education which fits in with our goals.

**Catherine:** As someone who just read through all the CAZA, AZA, WAZA frameworks, you sound like you're exactly where you need to be. Where I have started and the 2015 commitment by WAZA is the culture of conservation, so part of my proposal was to create goals for each department so everyone can work towards a common goal. This way everyone develops the culture and appreciation within the institution. But we have a long way to go so I look forward to having all your help.

**Stephen -** At Assiniboine our sustainability has been in and out of conservation, throughout its time and right now sustainability reports do not report through conservation. So I have spent a year trying to get a sense of conservation from our staff and it was really clear people thought of sustainability as conservation a lot of the time and were less clear on what conservation actually was. If sustainability is already in conservation you are at an advantage but sustainability is a hard road to hoe, a lot of folks don't want to change their ways, a HARD battle.

**Catherine:** So in Edmonton, formerly as a city planner, it was all based on using best available science and the IUCN is very clear on their definition of conservation: its protecting genetics and habitat of species and using those two things sustainably so my recommendation moving forward is that we contain our work around conservation within those three things as defined by the IUCN.

Thank-you all for coming. It was great to see you. Hopefully we can continue this conversation!

**ADJOURNMENT: 3:18pm**

**Next Meeting Date: Friday, September 23rd 2022 2pm EST**