Seal placentas prove invaluable to conservation genetics research

Conservationists regularly test the genetic makeup of many endangered species in order to understand the threats they face and, sometimes, to help them adapt to limited breeding choices. This isn't always an easy task. Sometimes animals are so rare they're hard to find in the wild, or the only evidence is hair or feces that may not contain a lot of DNA. Other times collecting a blood or tissue sample for DNA analysis can be dangerous, either to the researcher or the animal. After all, nobody likes to be tranquilized and then poked with a sharp needle.

So, how can conservationists collect DNA samples that will provide maximum information with the least amount of risk to the animals they're studying? One word: placentas.

Yes, placentas. According to a study published in the Finnish journal <u>Annales Zoologici Fennici</u>, placentas can be a valuable source of genetic material that can help identify inbreeding and reveal other important data, such as the genders of the newborns.

The researchers, from several universities and institutions in Finland, tried this out with Saimaa ringed seals (*Pusa hispida saimensis*), one of the <u>rarest seal species on the planet</u>. Only about 300 of these critically endangered seals remain, all in a land-locked lake in that country, where they face constant pressure from fishermen and climate change, which has caused a high level of infant mortality from lack of ice.

The GLP aggregated and excerpted this blog/article to reflect the variety of news, opinion and analysis. Read full, original post: A New Tool for Conservation Geneticists: Seal Placentas