**Wolves on B.C.’s Islands and Mainland genetically different**

|  |
| --- |
| 1. What are the differences in diet and hunting between island wolves and mainland wolves?

Why did the island wolves require different diets?* Island wolves- eating fish, clams, mussels🡪 learning how to hunt fish, break open and find shells🡪 ate this way due to the availability of food
* Mainland wolves- deer, moose, beavers🡪 learning how hunt 🡪 they ate this way because there is more meat available due to more forest
 |
| 1. What causes the resource use to be passed down through generations?-parents teach the wolves how to eat and what to eat
 |
| 1. What observations were made on the wolf populations based on Traditional Ecological Knowledge (Indigenous knowledge) and what observations were made based on scientific analysis?

TEK- two types of BC wolves* Noticed as areas were logged, more wolves moved onto islands
* Saw wolves get salmon out of river
* Saw wolves in rivers and estuaries

Scientific Analysis:-Looked at Feces- Island wolves- 90% diet was seafood- salmon, clams, mussels -Mainland- almost exclusively hunt land animals such as deer, moose and beaver |
| 1. Do you think that Natural Selection and or Adaptive Radiation has occurred with the wolf populations? Why or Why not?

Natural Selection: Yes/Maybe1. Variation in traits- behaviour – one eats seafood, other eats meat2. Differential reproduction- would need more info3. Heredity- behaviour is being taught by parents 4. End result- each type of wolf is suited to its environmentAdaptive Radiation: Yes1. Reproductive isolation – yes2. Taking advantage of different food sources or shelter- yes3. Availability of new niches – yes … moving to islands after their area is logged |
| 1. What human factors may risk the health of the island wolf population?
 |