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

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| 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/Maybe 1. Variation in traits- behaviour – one eats seafood, other eats meat  2. Differential reproduction- would need more info  3. Heredity- behaviour is being taught by parents  4. End result- each type of wolf is suited to its environment  Adaptive Radiation: Yes 1. Reproductive isolation – yes 2. Taking advantage of different food sources or shelter- yes  3. 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? |