How Climate Warming Affects Matanuska-Susitna, Alaska

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Introduction

Global climate change in the Matanuska-Susitna Valley is taking a rapid and vicious course that is constantly affecting the local *Homo sapien* population. The most disconcerting aspect of climate change in the Mat-Su Valley has quite possibly been the large and abrupt increase in the salmon population of the local rivers. With ocean temperatures rising, the main food source of the salmon, herring and needlefish, has experienced a population boom, in effect supplying the once hungry fish with plentiful snacks.

Materials and methods

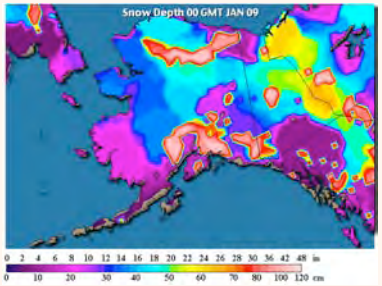
To conduct our research, we placed highly technical and complicated fish counting devices at various intervals along the Matanuska River. Our fish counters were detrimental to the methods of our research, because we attempted to count the fish with tally marks, but unfortunately, we found this to be somewhat inaccurate. We did, however, resort to manual counting techniques when recording the concentrations of fish eggs laid, by the female fish, during spawning season, which is when fish usually lay eggs. We found that

Fig. 3. This is the map that we used to navigate the river, and the marked points represent out fish counting stations. To ensure accuracy with our results, we used the same stations each time.

Results

After sticking a thermometer in the ocean on a constant basis, we determined that the rising ocean temperatures were responsible for an increase in salmon food, which in turn caused a sudden population boom in the number of salmon in the Matanuska-Susitna River. This is tragic news for the good citizens of the Matanuska-Susitna Valley, because the increase in salmon will rapidly exhaust the river, making it unsuitable for various recreational activities, and putting other species at risk for endangerment from the unbalanced ecosystem.

Fig. 4(a-c). This photographic evidence of our extensive labors involving this project proves that we were very diligent with our research.



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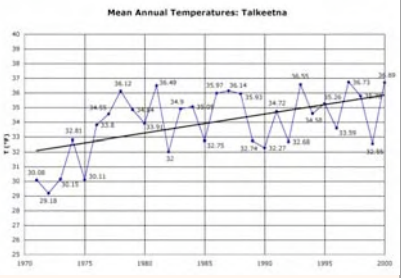
Mendehall Glacier Recession

2004	Marine Dates	Distance (m)	Distance/yr	Avg.
2004	1769	4209.36	17.91217	24.42343
2004	1786	4052.01	18.587202	
2004	1788	5478.97	25.365602	
2004	1806	1585.03	8.005202	
2004	1828	4325.37	24.575966	
2004	1833	3684.61	21.547427	
2004	1865	3669.32	26.397986	
2004	1885	3410.31	28.658067	
2004	1899	3656.72	34.825905	
2004	1916	3375.57	38.35875	



This graph shows the temperature in degrees Ferinhight as opposed to degrees celsius, also know as degrees centigrade. This is relevent to the number of fish infesting our local waters of the Matenuska-Susitna River, because the temperature of the air is what makes their dietary needs complete as it causes their food source to grow exponentially, which is evidenced by the extreme growth in the population of the fish, which is due to their not being emaciated because their food is growing.

Conclusions

To conclude our report, the results of our research reveal that this crisis could have disastrous reciprocations if no course of action is taken. I believe it is crucial that the world realizes that global warming is destroying our world and must be stopped immediately. In the meantime, however, nothing is being done to decrease the salmon population boom, and the rivers will soon be in disastrous shape. One might ponder the question, "what course of action may I take personally that might be an effective means to better control the salmon population in the Matanuska-Susitna River in the Matanuska-Susitna Valley, in Wasilla, Alaska, in the United States, in the Northern most hemisphere of the world?" The answer is absurdly simple; catch more fish!

Literature cited

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For further information

Please contact geogirlsakuas@edu.com *if you have any further questions*. More information on this and related projects can be obtained at www.swarthmore.gov/fisheries/warming/global/history/doc/education/rivers_streams/*alaska.html*. There is also a link to an online PDF-version of the poster as well.

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