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Thomas E. Osterkamp talks about a conference on greenhouse effect

1980s

Stephen Lay, interviewer

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Stephen Lay asked if an increase in carbon dioxide causing a greenhouse effect on the Earth and if it is what does this mean for Alaska. These questions will be addressed at an international conference to be held in Fairbanks in April. Scientists suspect that the increased carbon dioxide in the atmosphere causes an increase in the Earth's surface temperatures much like a greenhouse. The increases in carbon dioxide in the atmosphere have been largely caused by the burning fossil fuels in the last 150 years. Dr. Tom Osterkamp believes that this is the time to investigate potential effects of the so called greenhouse effect. Osterkamp said there is good evidence based on measurements of CO<sub>2</sub> in the atmosphere that the CO<sub>2</sub> content of the atmosphere is increasing and that increase will bring about a general warming of the Earth. The warming will be more pronounced in the higher latitudes. With this evidence at hand it is prudent at this time to gather scientists together and to look at what is possible and what may happen with this warming and to try to plan some research to address any problems that would be associated with that warming.

Lay said the conference will bring together Alaskan scientists with a number of internationally recognized experts in the field. Together they will represent a wide range of specialties. Osterkamp said they will be getting together a variety of people, meteorologists, hydrologists, marine scientists, geologists, and people who are interested in permafrost. The conference itself is a workshop. The result of the conference will be a dissemination of information and exchange of information between these scientists. They would also like to come up with some sort of a preliminary work plan or research plan that would help address some of the problems that they see that are identified in the conference.

Lay said that Osterkamp feels that only through the exchange of ideas from the different disciplines represented will the full understanding of the potential problems be developed. Osterkamp said they have to use an interdisciplinary approach because what they are dealing with is the environment which includes not only the Earth itself, but also the atmosphere. In order to really understand the problem they need a whole wide range of scientists in order to address all the problems involved in this large-scale environmental problem.

Lay said the conference will also try to develop a research plan to monitor and observe developments caused by the greenhouse effects. This approach is to keep the scientists up to date so they can use their knowledge to develop responses. Osterkamp said the potential effects of the CO<sub>2</sub> induced warming could be very severe. He said it is a fairly long-term thing in terms of a lifetime. He said the key point is that a prudent man given the evidence that does exist would want to design a plan or a program to keep an eye on what is happening so if things start to happen very fast or if the warming starts to affect the extent of the sea ice or the distribution of permafrost then one can devise a plan to combat

any problems that may arise from those things. He thinks it is something that you want to keep an eye on, but you don't want it to keep you awake at night.

Stephen Lay reports on campus activities at the University of Alaska Fairbanks.