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Glenn Juday, interviewee

Steve Lay, host

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Steve Lay said one of Alaska's biggest tourist attractions is disappearing from view. The Columbia Glacier is retreating away from the sea. It will take two or three decades before it stops its retreat, but within a few years it will no longer be visible in Prince William Sound. UAF scientists are going to be watching and monitoring the changes when they occur as the glacier returns from the ocean to the mountains. This is a unique research opportunity. Dr. Glenn Juday said there are 52 tidewater glaciers in Alaska. All of them except Columbia Glacier have undergone a process called drastic retreat. Glaciers normally advance and retreat very slowly. Tidewater glaciers can get into a situation where they retreat rapidly and spectacularly. Their project is to take a look at the process of drastic retreat now they know it is underway at Columbia Glacier and watch the succession of life that develops on the land surfaces freed from the ice.

Lay said this isn't the first time scientists have chartered the glaciers retreat, but it has the opportunity to be the best from a scientific viewpoint. Juday said there have been studies of forest succession and development in the wake of retreating glaciers and even with retreating tidewater glaciers in Alaska such as Glacier Bay National Park. No one has had the opportunity to take a look at this process right at the beginning. It is the last one of these kind of glaciers undergoing retreat in North America. It is an opportunity to look at retreat from the very earliest stages. Lay said as the ice disappears thousands of acres of land will be uncovered and it will be a dramatic change in the soon-to-be-uncovered land for the next few decades. Juday said they are restricting their look to terrestrial ecology, the dry land side of things. They will be looking at forest development and principally the plants and plant communities as they develop into the new forest. Juday isn't sure what the plant communities will be in the area. He said the greatest area of uncertainty in forest development is how much do the earlier events influence what ultimately happens. One thought is while the earlier events may be important eventually everything ends up being homogenous. Another thought says the earlier events determine what kind of forest develops. This is one of the principal questions they will be attempting.

Lay said findings from this study have applications throughout Alaska. Juday said one kind of use the information they will be developing could be applied to the treatment of drastically disturbed landscapes. There is a whole ecosystem involved and a whole process. This would be a good model about how to deal with strip mining on coal land.