

Barry Baker, PhD.
Director of Canyonlands Research Center
The Nature Conservancy

Barry Baker

So the purchase of the Dugout Ranch was just the beginning for the Nature Conservancy. We see this endeavor of creating a world-class research center to study the effects of climate change and land use in this part of the desert southwest, is critically important, not only for conservation, but also for ranchers, policy-makers, land managers, and other people in the West.

Interviewer-John Howe

You were talking about the real issue that this area is warming faster than other areas. What's the real issue here?

Barry Baker

The real issue is that the western U.S. seems to be warming at a faster rate than the rest of the United States. This has implications for not only natural vegetation, but also the people who live in this area.

Interviewer-John Howe

What is the consequence?

Barry Baker

Studies are showing us that with the changes in precipitation, changes in temperature, that we are starting to see stresses in the vegetation. Some of the cool season grasses that livestock and wildlife need are actually declining. We're starting to see in some areas changes in the amount of shrubs in the area. We're seeing snowmelt that is coming off the mountain much earlier and at a much higher rate.

Interviewer-John Howe

What's the purpose of the center, and what are you hoping to accomplish?

Barry Baker

The Canyonlands Research Center is a partnership with The Nature Conservancy, the BLM, the National Park Service, USGS, Utah State University, and the Indian Creek Cattle Company. Our vision is to develop a world-class research center where we can understand the impacts and the intersections of climate and land use.

Barry Baker

The Canyonlands Research Center is a partnership with the Indian Creek Cattle Company, the BLM, the National Park Service, the U.S.G.S and The Nature Conservancy. Our vision for the center is to create a world-class research facility where scientists from all over the world can come and study the impacts of climate change and land use on these fragile systems, these fragile ecosystems.

Interviewer-John Howe

Tell me why these systems are so fragile here?

Barry Baker

One of the difficult things, or, one of the difficulties in trying to understand the impacts of climate change is untangling, or, separating the impacts that are due from climate alone or, and, one of the difficulties in understanding the impacts of climate change is trying to understand how much of the change that we see is due to climate, and how much is due to land use. Actually, since 1991, there have been over thirty thousand scientific publications on the impacts of climate change. Equally, as many articles, around thirty one thousand articles, have been published on land use, but in that time there have been only a few hundred articles that have been published on the combined impacts of climate change and land use, and how we adapt to those changes. So we're really on the cutting edge of our scientific knowledge. This center, when it's developed, will provide information not only for researchers, but also to land managers, such as the BLM, the Park Service, and also to ranchers in this area.

Interviewer-John Howe

When you started the center did you find mistrust with the ranchers and things? What did it take to get them on your side?

Barry Baker

The Nature Conservancy's had a long history of bringing people to the table to talk about difficult issues. One of the reasons that we're successful is, I think, we listen to all sides, because really what we're looking at is a solution to a problem and everybody can bring information to help solve that problem.

Interviewer-Jeff Elstad

Why is The Nature Conservancy's involvement with the Dugout Ranch important?

Barry Baker

The Nature Conservancy purchased the Dugout Ranch in 1997 actually to help protect this landscape. There are eleven rare, globally rare, plants and animals found here, but just as important is that this landscape is iconic for the American West. People in this part of the world rely on these landscapes to make a living. One of the reasons that this center is so important is the solutions that we'll find through research and working with ranchers, and working with land managers, is to try to help, to secure this landscape for future generations.

Interviewer-Jeff Elstad

What is the Research Center, and what does it hope to accomplish?

Barry Baker

The Research Center is a partnership with Indian Creek Cattle Company, The Nature Conservancy, the BLM, the Park Service, USGS, Utah State University, and our sole purpose is

to try to understand the impacts of climate change, land use, and their interactions. What we hope to gain from this is information that we can provide land managers to help them adapt to periods of climate variability. In our historical record, we have droughts that far surpass any drought we've seen in modern history. Ranchers are constantly having to battle seasonality, changes in weather, and now they're faced with this long-term trend we're seeing in increasing temperatures. Projections from state-of-the-art climate models are showing that the West, and particularly the desert southwest, is going to become a hotter and drier place, which actually has huge consequences in an environment or a landscape such as this. Already we're seeing changes in species composition. We're seeing invasions from non-native species, and, in some places we're seeing changes in fire frequency. Should this landscape become drier, it will only make some of these ecological processes worse. But more importantly, there are thirty eight million people that rely on the water that flows through this region.