

Dan Rather Reports

Episode Number: 527

Episode Title: What Happened Next: Wolfman

Description: A look back at previous stories from northwest Montana, including the first wolf hunt for grey wolves, trapping giant grizzly bears and disappearing ice from Glacier National Park.

TEASE:

DAN RATHER (VOICE OVER)

TONIGHT... FOLLOW-UP INVESTIGATIONS, NEW INFORMATION IN A SERIES WE CALL "WHAT HAPPENED NEXT?"

FIRST UP, OUT TO BIG SKY COUNTRY. A COMEBACK BY MOTHER NATURE IN MONTANA. HUNDREDS OF GREY WOLVES...SO MANY... THEY'RE HUNTED FOR THE FIRST TIME IN DECADES.

AND BEWARE OF THE BEAR...GRIZZLIES ... PROTECTED FOR YEARS IN AN EVER SHRINKING NEIGHBORHOOD.

RICK MACE

Right now what we have left for grizzly bears you can walk across in a day; you can drive around in six hours. That's what's left.

RATHER (VOICE OVER)

BUT NOW THE POSSIBILITY OF WHAT ONCE WOULD HAVE ONCE BEEN UNTHINKABLE...

TIM MANLEY, GRIZZLY BEAR MANAGEMENT SPECIALIST

I think we're getting pretty close to delisting on the grizzly bear, the recovery of the grizzly bear. We've got a good population estimate, which we feel is a good number.

RATHER (VOICE OVER)

ALSO...ON THIN ICE...GLACIERS DISAPPEARING BEFORE OUR VERY EYES

DAN FAGRE, RESEARCH ECOLOGIST AT US GEOLOGICAL SURVEY

Many of these glaciers are now less than a fourth of the size that they used to be.

RATHER (VOICE OVER)

AND NOW... INVESTIGATING THE IMPACT OF A DEVASTATING COLLAPSE.

FAGRE

We basically lost one small glaciers worth of ice out of Blackfoot glacier in one catastrophic event that nobody saw.

RATHER (VOICE OVER)

DIGGING DEEPER INTO OUR ORIGINAL INVESTIGATIONS. OUR REPORTING NEVER STOPS. WE'LL BRING YOU THE NEWS, TONIGHT ON DAN RATHER REPORTS.

WHAT HAPPENED NEXT: WOLFMAN

RATHER (ON CAMERA)

GOOD EVENING FROM NEW YORK. TONIGHT WE TAKE YOU OUT WEST...TO THE WILDS OF MONTANA FOR UPDATES INCLUDING NEW INFORMATION AND NEW MATERIAL ON THREE STORIES WE'VE REPORTED OVER THE YEARS IN AND AROUND MAGNIFICENT GLACIER NATIONAL PARK. FIRST, THE GREY WOLF...AN ANIMAL THAT'S AS CONTROVERSIAL AS IT IS MYSTERIOUS. THIS CREATURE WAS ONCE NEAR EXTINCTION, AND IF IT WASN'T FOR FEDERAL PROTECTION, WILDLIFE BIOLOGISTS SAY IT PROBABLY WOULD HAVE BEEN WIPED OUT YEARS AGO. BUT AFTER THE WOLVES WERE LISTED UNDER THE ENDANGERED SPECIES ACT, THEY BEGAN A COMEBACK...SO MUCH SO THAT THEY WERE DE-LISTED IN 2007...AND LAST YEAR THE FIRST WOLF HUNT WAS ALLOWED IN DECADES. SO WHAT HAPPENED? WE RECEIVED AN ENORMOUS RESPONSE FROM OUR FIRST STORY, ON BOTH SIDES OF THE ISSUE. HERE'S AN EXCERPT FROM OUR ORIGINAL REPORT.

RATHER (VOICE OVER)

THESE RARE IMAGES OF THE GRAY WOLF WERE CAPTURED BY MOTION ACTIVATED CAMERAS PLACED BY STATE WILDLIFE BIOLOGISTS IN NORTHWESTERN MONTANA. JUST A FEW DECADES AGO, WOLVES WERE VIRTUALLY NONEXISTENT HERE – AND IN MOST OF THE UNITED STATES. WHEN THE ENDANGERED SPECIES ACT WAS PASSED IN 1973, THE GRAY WOLF WAS ONE OF THE FIRST ANIMALS TO BE PUT UNDER PROTECTION. IN 1995, 20 YEARS AFTER THEY WERE FIRST ADDED TO THE ENDANGERED LIST, 66 GRAY WOLVES WERE REINTRODUCED INTO YELLOWSTONE

NATIONAL PARK. AT THAT TIME, THE U.S. FISH AND WILDLIFE SERVICE SET A MINIMUM GOAL OF 300 WOLVES IN THE REGION. THE WOLF POPULATION FIRST REACHED THAT NUMBER IN 2000, AND HAS CONTINUED TO GROW AT AN AVERAGE OF 22 PERCENT A YEAR.

KENT LAUDON, WOLF MANAGEMENT SPECIALIST FOR MONTANA FISH, WILDLIFE, AND PARKS

(Howling)

RATHER (VOICE OVER)

KENT LAUDON IS THE MAN IN CHARGE OF TRACKING THE WOLF POPULATION IN THIS CORNER OF MONTANA. HE IS A WOLF MANAGEMENT SPECIALIST FOR MONTANA FISH, WILDLIFE, AND PARKS AND IS RESPONSIBLE FOR AN AREA OF 15,000 SQUARE MILES.

LAUDON AND HIS COLLEAGUES CHART THE SIZE, HEALTH, AND GEOGRAPHIC DISTRIBUTION OF THE PACKS. WHEN A NEW PACK TURNS UP, THEY SET TRAPS TO CATCH ONE OF THE ADULT WOLVES SO IT CAN BE RADIO COLLARED AND MONITORED REMOTELY.

LAUDON

This is good...maybe right here...but it's a little open so an animal could come in that way. Everything has to be basically perfect or it's not going to work. And that includes the lure attracting the animal, the animal coming down the road, and then the animal having to step perfectly correct.

RATHER (VOICE OVER)

IT TAKES SEVERAL HOURS TO SET ONE OF THESE TRAPS AND SUCCESSFULLY CATCHING A WOLF CAN TAKE WEEKS OR MONTHS.

LAUDON

This is the transmitter, essentially, and here's the receiver. It just lets out a signal; it's a beep [BEEPING].

RATHER (VOICE OVER)

LAUDON REGULARLY SURVEYS HIS REGION FROM THE AIR TO COUNT HOW MANY WOLVES IN EACH PACK SURVIVED THE SEASON AND HOW MANY NEW PUPS WERE BORN. THIS HELPS THE WOLF SPECIALISTS ARRIVE AT AN ESTIMATE OF THE OVERALL POPULATION, AS WELL AS THE NUMBER OF BREEDING PAIRS – WHICH ARE PAIRS OF ADULT WOLVES

THAT PRODUCED AT LEAST TWO OFFSPRING IN THE LAST BREEDING SEASON.

LAUDON (IN HELICOPTER)

There's two across the road, there's two way down here...

RATHER (VOICE OVER)

THE NUMBER OF BREEDING PAIRS IS AN IMPORTANT MEASURE OF THE POPULATION'S VIABILITY.

LAUDON (IN HELICOPTER)

That's the most we've seen in there in awhile, can't make out if any of those are pups.

RATHER (VOICE OVER)

THE WOLVES HAVE BEEN THRIVING. LAST YEAR, IT WAS ESTIMATED THERE WERE AT LEAST 1639 WOLVES AND 95 BREEDING PAIRS IN THE NORTHERN ROCKIES. THAT'S THREE TIMES THE MINIMUM RECOVERY GOAL SET BY THE U.S. FISH AND WILDLIFE SERVICE WHEN WOLVES WERE REINTRODUCED. MANY HUNTERS AND RANCHERS, WHO THINK WOLVES ARE DOING TOO MUCH DAMAGE TO LIVESTOCK AND BIG GAME HERDS, WOULD LIKE TO SEE A POPULATION MUCH CLOSER TO THAT MINIMUM — 10 BREEDING PAIRS IN EACH STATE AND JUST A FEW HUNDRED WOLVES IN TOTAL. BRANDON BATES IS A SPOKESPERSON FOR THE ROCKY MOUNTAIN ELK FOUNDATION, A HUNTER-ORIENTED CONSERVATION GROUP THAT SUPPORTS DELISTING.

BRANDON BATES, SPOKESPERSON FOR THE ROCKY MOUNTAIN ELK FOUNDATION

Ten breeding pairs was supposed to be that -- that --that number that said "Okay, they're reintroduced at this rate they're going to be a success." Now we're -- we've exceeded that by 500% in some instances, in some cases. They're absolutely exploding, and if something's not done, we're in trouble.

RATHER (VOICE OVER)

MANY HUNTERS THINK THAT WOLVES ARE KILLING TOO MANY ELK AND WHILE DATA SHOWS THAT ELK POPULATIONS REMAIN STRONG IN MOST AREAS, BATES SAYS THAT'S NOT WHAT HUNTERS ARE SEEING – OR HEARING – ON THE GROUND.

BATES

For the past 25 years, they used to hear the --the mountains light up in September. They're not hearing a peep. They're not seeing anything. They're seeing a ton of wolf tracks and they're seeing a reduced number of deer and elk tracks – a dramatically reduced number.

RATHER (VOICE OVER)

FEDERAL OFFICIALS SAY THIS YEAR'S HUNTING SEASON WILL LEAVE THE WOLF POPULATION MORE OR LESS UNCHANGED. BUT CRITICS ARE CONCERNED THAT UNDER THE CURRENT NEW PLAN, IDAHO AND MONTANA HAVE THE AUTHORITY TO KILL MANY MORE WOLVES.

SUZANNE STONE, WILDLIFE CONSERVATIONIST AND NORTHERN ROCKIES REPRESENTATIVE FOR DEFENDERS OF WILDLIFE

We have somewhere between 1600 and 2000 wolves in the region right now. Unfortunately, the biggest concern is that the desisting plan under the federal government's plan only protects for 450 wolves here in the region, period. That's 150 wolves per state.

RATHER (VOICE OVER)

SUZANNE STONE IS A WILDLIFE CONSERVATIONIST AND THE NORTHERN ROCKIES REPRESENTATIVE FOR DEFENDERS OF WILDLIFE, ONE OF THE ENVIRONMENTAL GROUPS THAT'S FIGHTING THE DE-LISTING PLAN IN COURT.

STONE

Unfortunately, the biggest concern is that the delisting plan under the federal government's plan only protects for 450 wolves here in the region, period. That's 150 wolves per state.

RATHER (VOICE OVER)

THE FEDERAL GOVERNMENT HASN'T SIGNIFICANTLY CHANGED ITS RECOVERY GOALS SINCE THE FIRST WOLF RECOVERY PLAN WAS CREATED IN 1987. STONE SAYS THE GOVERNMENT HASN'T KEPT UP WITH SCIENCE.

STONE

I think politics became more of a driving force with wolves here in the region. It certainly has been where the most controversy has occurred, is at the political level. And rather than going back and looking at and bringing the scientists together that disagree, and

trying to come up with a strong wolf recovery plan, they stuck with the old goals and the old interpretation and went with that. Allowing that many wolves to be killed really isn't about conservation or management, it's allowing the states to again go back and persecute wolves down to the numbers that are not sustainable.

ED BANGS, RECOVERY COORDINATOR FOR THE US FISH AND WILDLIFE SERVICE

My job as a scientist, biologist, is just the science. And the science is absolutely rock solid. Wolves are here to stay...

RATHER (VOICE OVER)

ED BANGS IS ONE OF THE AUTHORS OF THE DE-LISTING PLAN. AS WOLF RECOVERY COORDINATOR FOR THE U.S. FISH AND WILDLIFE SERVICE, HE'S BEEN LEADING THE GOVERNMENT'S EFFORTS TO RESTORE WOLVES TO THE REGION FOR OVER 20 YEARS.

BANGS

My goal was to recover the wolf population, and remove it from the endangered species act because it was recovered. And we've done all that. The wolves have been recovered, there's populations, we've got more wolves in more places than we ever hoped, and with fewer problems than we ever thought would happen. And so from every measure it's been an amazing success story, and I think the American people should be quite proud of that.

RATHER (VOICE OVER)

BUT THAT SUCCESS HAS COME AT A PRICE – BOTH FOR RANCHERS AND ALL TAXPAYERS – AND THAT'S WHY BANGS SAYS IT'S TIME TO TURN THINGS OVER TO THE STATES.

BANGS

In 2008, we had about 1650 wolves in the northern Rocky Mountains and they caused a record amount of damage and we spent a record amount of money managing them. We spent about 3.4 million dollars in taxpayer money to manage wolves. USD Wildlife Services which is a Federal agency that investigate causes of livestock death spent about a million dollars investigating reports of wolf damage and controlling problem wolves. The state compensation programs paid nearly a half a million dollars in confirmed wolf damage, which is a fraction of all the damage. And so I think the key is... how are we gonna manage wolves into the future, so that we have wolves conserved and minimize the damage that wolves do to private citizens.

RATHER (VOICE OVER)

AS THEIR NUMBERS GROW, WOLVES ARE KILLING MORE LIVESTOCK. BUT LAUDON FEELS THAT PEOPLE ARE TOO QUICK TO BLAME EVERYTHING ON THE BIG BAD WOLF.

LAUDON

Once a wolf pack shows up, nothing dies of anything else anymore. Because wolves killed it, you know. So of course the reality is- is critters die of all kinds things. Sometimes it's due to wolves, sometimes it's due to lions, sometimes it's due to malnutrition...

RATHER (VOICE OVER)

DATA FROM THE U.S. DEPARTMENT OF AGRICULTURE SEEMS TO BACK HIM UP. THEIR STATISTICS INDICATE THAT WOLVES ACCOUNT FOR ONLY A FEW PERCENT OF CONFIRMED SHEEP AND CATTLE DEATHS, LESS THAN COYOTES AND DOMESTIC DOGS. WHATEVER THE REAL NUMBER, THERE'S NO QUESTION THAT WOLVES CAN HAVE A SIGNIFICANT IMPACT ON INDIVIDUAL RANCHERS.

KIM BAKER, VICE PRESIDENT OF THE MONTANA CATTLEMAN'S ASSOCIATION

They're not seeing what they're going on the ground, you know. I mean, and that's my greatest disappointment.

RATHER (VOICE OVER)

KIM BAKER IS THE VICE-PRESIDENT OF THE MONTANA CATTLEMAN'S ASSOCIATION. SHE AND HER HUSBAND JIM HAVE A RANCH IN HOT SPRINGS, MONTANA THAT'S BEEN IN THE FAMILY FOR FOUR GENERATIONS. THEY SAY WOLVES COST THEM ALMOST \$25,000 LAST YEAR.

JIM BAKER

Before the wolves were here, we never had them kind of losses, so that kind of pinpoints it right down to one thing.

KIM BAKER

Last year we had three confirmed kills. There was one just over there in that little coulee. There was one down that way, and there was one back in our lease. And this year the killing started again on Labor Day weekend, we had two kills in 24 hours. It's become a very problem pack.

JIM BAKER

Well, the thing of it is they look at a wolf and see an animal. They ought to come out here and see the kills and all the animals that we have to look at. And if they had to do that they'd really be changing their mind.

RATHER (VOICE OVER)

ON OPPOSITE EXTREMES OF THE WOLF ISSUE ARE TWO VERY DIFFERENT PERCEPTIONS OF WOLVES.

DEFENDERS OF WILDLIFE VIDEO

“Hi, I’m Ashley Judd for Defenders of Wildlife.”

RATHER (VOICE OVER)

ENVIRONMENTAL AND WILDLIFE CONSERVATION GROUPS LIKE DEFENDERS OF WILDLIFE OFTEN FOCUS ON WOLVES' HUMAN ATTRIBUTES, THEIR ROLE IN THE ECOSYSTEM, AND THEIR POWER AS A SYMBOL OF A NATURAL WORLD UNSPOILED BY PEOPLE.

DEFENDERS OF WILDLIFE VIDEO

“Their families are a lot like ours, with parents teaching their young the skills they need to make their way in the world.”

RATHER (VOICE OVER)

BUT MANY RANCHERS AND HUNTERS SEE WOLVES SIMPLY AS PREDATORS – WHO SOMETIMES KILL FOR SPORT. AND THEY POINT TO A STAGGERING INCIDENT THIS AUGUST THAT GRABBED HEADLINES IN MONTANA. ON A LIVESTOCK RANCH NEAR THE TOWN OF DILLON, A PACK OF WOLVES KILLED OVER 120 SHEEP IN ONE NIGHT – FAR MORE THAN THE WOLVES COULD POSSIBLY EAT. BIOLOGISTS CALL THIS "SURPLUS KILLING" AND WHILE RARE, IT ADDS CREDENCE TO NEGATIVE IMAGES OF WOLVES. ED BANGS, FROM THE U.S. FISH AND WILDLIFE SERVICE, SAYS BOTH SIDES ARE EXAGGERATING THEIR CLAIMS.

BANGS

It’s not about real wolves. It’s about what people think wolves are. And because of that, if you like wolves you only tend to emphasize the things, good things that wolves can do. If you don’t like them you only emphasize the bad things that wolves can do. And like all of us, wolves have their good and bad points... I can understand why some people don’t

want wolves killed by people, but that's an animal rights issue, that isn't a scientific issue.

LAUDON

The legend of the animal far exceeds reality, and there's just something in that, in people's perceptions of wolves, you know, on both sides, you know. People are very, very protective of wolves or very, uh, I guess disgusted with wolves, you know, and there's a lot of misinformation out there. Why it reaches the profile that it does, I can't say that I really understand.

RATHER (ON CAMERA)

SO, WHAT HAPPENED NEXT? DESPITE TALK OF THE WOLF BEING AN ELUSIVE PREY, HUNTERS IN IDAHO KILLED 188 OF THEM DURING THE SEASON WHILE IN MONTANA, 72 WERE TAKEN. BUT CONSERVATIONISTS FILED ANOTHER APPEAL AND A FEDERAL JUDGE IN MONTANA HAS NOW PLACED THE WOLVES BACK UNDER FEDERAL PROTECTION...MUCH TO THE IRE OF HUNTERS AND RANCHERS IN BOTH MONTANA AND IDAHO.

WAS THE WOLF MANAGEMENT PROGRAM WORKING? WE SPOKE AGAIN WITH MONTANA BIOLOGIST AND WOLF EXPERT KENT LAUDON.

LAUDON

I am disappointed because wolves are recovered. And so wolves really need to come off the Endangered Species List. An important part of the act is that there is a day that there is success. And species are recovered, and are removed off of the list. That plus-- just keeping the animosity at its highest level is really, I think, problematic for wolves. I mean, I-- if you look at the overall conservation of the species that is absolutely the wrong thing to be doing right now you know, and so-- there are a lot of people that aren't very happy about wolves. I think that with-- regular state management of wolves, like any other wildlife species, life will go on. Life will go on. We've got plenty of lions. We think lions have really made-- a comeback since-- '96/'97 winter, when they were really in trouble after a lot of the deer died in that winter. Lions are back up. We hunt lions. Bears are plentiful. Black bears are plentiful; in lots of parts of-- even western Montana. And we hunt a lot of black bears here. And so this is just regular stuff that the state's been doin' for a very, very long time, and it would be nice to just take the hype out of it, and put it back into somethin' normal, and get on with life. And I think, ultimately, that is the best thing that we can do for wolves.

RATHER (VOICE OVER)

REMEMBER THE WOLF POPULATION IS LEGALLY REQUIRED TO BE

AT LEAST 300 ANIMALS. THE BEST ESTIMATE FROM BIOLOGISTS IS SOMEWHERE AROUND 1700 WOLVES NOW ROAM THE NORTHERN ROCKIES.

LAUDON

The recovery was a huge success. Wolves -- came back-- at a much faster rate than anyone had anticipated. The population is still growing. The population is connected throughout the Northern Rockies, and connected into-- the Canadian portion of the population. And now-- for two years now, wolves are starting to spread into Washington and Oregon, as well.

RATHER (VOICE OVER)

BUT BIOLOGISTS LIKE KENT LAUDON FEEL LIKE THEY'VE LOST CONTROL OF THE WOLF PROGRAM.

LAUDON

Wolves obviously are being managed now in the courtroom. And, of course, that's problematic-- that you would-- hope that the management would be left to those professionals on the ground that deal with management day in and day out.

RATHER (VOICE OVER)

AND MANAGEMENT, ACCORDING TO LAUDON MEANS A REDUCTION IN NUMBERS. EVEN THOUGH THE WOLF HAD NEVER BEEN HUNTED IN THE NORTHERN ROCKIES, IDAHO AND MONTANA SOLD TENS OF THOUSANDS OF PERMITS LAST YEAR TO HUNTERS WHO WANTED TO TAKE THEIR SHOT. A QUOTA WAS SET FOR 75 ANIMALS IN MONTANA.

LAUDON

Well, some of us did think that-- that particular quota was achievable. And so it was a very low quota, it was 75. It was conservative. It was known to be conservative. And that's what we wanted to do with our first step forward in the hunting season, was to go slow. And there were a lot of unknowns. I mean, there has never been a legal hunting season, a regulated hunting season in the state of Montana. This is the first one ever. And so the conservative structure was set out, and the quota was filled in-- in the third week of the season, I believe. And so-- it turned out that functionally, people can hunt wolves.

RATHER (VOICE OVER)

THE FEDERAL JUDGES RULING NOW MEANS NO HUNT THIS YEAR...UNLESS A HIGHER COURT OVERTURNS THE DECISION. IN THE MEANTIME THE POPULATION CONTINUES TO GROW.

LAUDON

I obviously am concerned a lot about the conservation of the species. I mean, it's central to my job, my position here. And-- it would be nice that-- we get past all the nit-picking, so that we could reduce all that animosity and the polarity and just the whole volume of the yelling and name calling. And it all ends. And we gotta get past it, and just manage wolves like any other species. The hope then, the next step with management, people will find, hopefully, more tolerance.

RATHER (ON CAMERA)

AND THE CONTROVERSY SHOWS NO SIGN OF COOLING ANYTIME SOON. IDAHO STATE OFFICIALS SAY THAT, IN SPITE OF THE COURT RULING, THEY WILL PUSH FOR A PLAN THAT CALLS FOR THE REDUCTION OF THE WOLF POPULATION IN THAT STATE BY 45 PERCENT. COMING UP NEXT, A FOLLOW UP REPORT ON OUR STORY ABOUT ANOTHER ANIMAL THAT WAS ONCE IN PERIL...THE GREAT GRIZZLY BEAR. STAY WITH US.

WHAT HAPPENED NEXT: MONTANA GRIZZLIES

RATHER (ON CAMERA)

WELCOME BACK...AND NOW AN UPDATE ON THE GRIZZLY BEAR. FOR THIS REPORT WE GO BACK TO NORTHWEST MONTANA...AND A STORY WE ORIGINALLY BROADCAST IN DECEMBER 2006. AT THAT TIME, SCIENTISTS WHO WORK NEAR GLACIER NATIONAL PARK, WHICH HAS THE HIGHEST GRIZZLY BEAR POPULATION IN THE LOWER 48, WERE BEGINNING TO USE SOPHISTICATED TECHNOLOGY TO TRACK THE BEARS.

RICK MACE, RESEARCH BIOLOGIST

There are very few animals on a worldwide basis that elicit as much respect, love, fear or hate as the grizzly bear.

RATHER (VOICE OVER)

STUDYING GRIZZLY BEARS IS THE WORK OF RESEARCH BIOLOGIST RICK MACE WITH MONTANA FISH WILDLIFE AND PARKS.

MACE

There's something about a man-eater, even an occasional man-eater that builds in the lore of a particular society and the truths and the stories that are told over time seem to well up until finally the --the animal becomes larger than life.

RATHER (VOICE OVER)

AND JUST PLAIN LARGE. A MONTANA MALE GRIZZLY CAN WEIGH UP TO 800 POUNDS AND EAT AS MUCH AS 50 POUNDS A DAY AS HE NEARS HIBERNATION. BUT THROUGHOUT THE WEST THE GRIZZLY BEAR IS IN PERIL. TODAY GRIZZLIES POPULATE JUST 2% OF THEIR HISTORIC RANGE, WHICH ONCE REACHED FROM THE PLAINS TO THE PACIFIC AND INTO MEXICO.

THE DIVERSE FOREST OF THE NORTHWEST CONTINENTAL DIVIDE IS CONSIDERED THE BEST HABITAT FOR LONG TERM SURVIVAL OF THE BEAR BUT THEY ARE NOT OUT OF THE WOODS YET. AS PEOPLE CROWD THEM THE GRIZZLY IS INCREASINGLY HAVING TO SHARE THE REAL ESTATE.

MACE

They look at a place like Glacier National Park Montana and they say, "Well look there's 400 bears in Glacier Park, all is good." But they have to realize that represents 50 percent of the population. Right now what we have left for grizzly bears you can walk across in a day; you can drive around in six hours, that's what's left.

RATHER (VOICE OVER)

BUT BEARS DON'T KNOW BORDERS AND IN THE LAST THREE YEARS MORE THAN 70 BEARS HAVE BEEN KILLED BECAUSE OF THEIR ENCOUNTERS WITH MAN. FOR THEIR OWN GOOD, SOME OF THE BEARS ARE WATCHED LIKE HAWKS. BUT FIRST THEY HAVE TO BE CAUGHT AND COLLARED SO TRAPS ARE SET UP LIKE THIS ONE OUTSIDE OF GLACIER NATIONAL PARK.

THESE ANIMALS HAVE ENORMOUS STRENGTH. JUST WATCH WHAT THIS FIFTEEN YEAR OLD FEMALE DOES TO THIS STEEL ROD AS BIOLOGISTS TRY TO SEDATE HER FOR RESEARCH.

TANYA

Holy monkeys.

BIOLOGIST 1

Did she get it?

BIOLOGIST 2

No, but she's dopey.

BIOLOGIST 1

She's going down now...yup.

RATHER (VOICE OVER)

OVER THE NEXT HOUR THE BEAR THEY CALL THE BIG CREEK FEMALE FOR THE DRAINAGE AREA SHE FREQUENTS, GIVES SCIENTISTS HAIR AND BLOOD SAMPLES FOR DNA IDENTIFICATION AND GETS MEASURED AND CHECKED THOROUGHLY. SHE IS ALSO FITTED WITH A GPS COLLAR THAT WILL TRACK HER BY SATELLITE AS SHE MOVES ABOUT THE HABITAT. WHEN THE BIG CREEK FEMALE WAKES UP SHE WILL BE PART OF A STUDY OF BEARS IN THE NORTHWEST CONTINENTAL DIVIDE ECOSYSTEM THAT WILL EVENTUALLY HELP DETERMINE WHETHER THE GRIZZLY MEETS THE CRITERIA FOR REMOVING IT FROM THE ENDANGERED SPECIES LIST.

BIOLOGIST 1

Right now she isn't interested in us. Go!

MACE

If the population numbers are high and the trend is stable to increasing, that does bode well for delisting the grizzly bear under the endangered species act. However there are those who suggest that having 800-1000 grizzly bears in a world where there used to be 100,000 is simply an inadequate number.

RATHER (VOICE OVER)

RICK MACE IS HEAD OF A THREE YEAR OLD STUDY THAT IS LOOKING AT SURVIVAL AND REPRODUCTION OF GRIZZLY BEARS IN NORTHWEST MONTANA.

MACE

So here's an interesting bear.

RATHER (VOICE OVER)

FROM A COMPUTER IN HIS OFFICE, RICK DOWNLOADS DATA FROM 30 COLLARED BEARS AND TRACKS THEIR MOVEMENTS THROUGHOUT NORTHWEST MONTANA.

MACE

What's interesting is if we pan north we see this bear has made three movements of over 60 miles apiece up and north into the valley where the city of Kalispell is. So, this bear navigated extensively through the valley and never did get into trouble.

RATHER (VOICE OVER)

BUT BEARS DO GET INTO TROUBLE AS THEY MIGRATE FROM AREAS LIKE GLACIER NATIONAL PARK WHERE THEY ARE PROTECTED INTO POPULATION CENTERS LIKE KALISPELL AND WHITEFISH IN NORTHWEST MONTANA. THERE THEY BECOME USED TO HUMANS AND WHAT THEY SEE AS AN EASY UNLIMITED FOOD SUPPLY.

TIM MANLEY, GRIZZLY BEAR MANAGEMENT SPECIALIST

What we're gonna do is go ahead and set up this big trap and we're gonna rig it so that he's got to go all the way to the front of the trap to get any of the bait.

RATHER (VOICE OVER)

TIM MANLEY A MANAGEMENT SPECIALIST FROM MONTANA FISH WILDLIFE AND PARKS IS DEALING WITH A PROBLEM THAT'S BECOMING ALL TOO COMMON, BEARS ARRIVING FOR DINNER UNINVITED AND UNANNOUNCED. ON SANDRA GARRETT'S LAND A GRIZZLY HAS MADE A MEAL FROM HER CHICKEN COUP AND RABBIT HUTCH. NOW MANLEY IS TRYING TO TRAP THAT BEAR AND MOVE IT TO SAFER TERRITORY.

YOUNG BOY

He's an evil bear.

SANDRA GARRETT

The rabbits was the most devastating. One -- I mean I built the rabbit hutch. It took me about a week of my own hand skills I guess you can call it, and the worst part was being pretty upset trying to tell my 10 year old that his rabbits were gone. That was pretty upsetting.

MANLEY

So this one has a ramp so he can walk right up the ramp, and so we're going to bait all that up.

GARRETT

I hope they get it and just put him somewhere else where he can roam around and be happy and hibernate and stay away from my chickens and my rabbits and my house.

RATHER (VOICE OVER)

BUT EVEN THOUGH GRIZZLIES MAY COME CLOSE FOR A FREE MEAL, THEY ARE NOT EASILY CAPTURED. FOR SCIENTISTS TRYING TO STUDY THEM, THEY CAN BE ELUSIVE.

BEARS ARE EXTREMELY CAUTIOUS AND IT CAN TAKE DAYS OR WEEKS BEFORE THE ANIMALS ARE CONFIDENT ENOUGH TO CLIMB INTO A TRAP. SCIENTISTS ALSO USE HIDDEN LEG SNARES TO CATCH THEM.

BIOLOGIST 1

He seems pretty well tangled. Easy...

RATHER (VOICE OVER)

BESIDES BEING MONITORED BY SATELLITE, THE RELEASED BEARS ARE ALSO TRACKED BY RADIO TELEMETRY FROM THE GROUND AND FROM THE AIR. SO MUCH OVERSIGHT IS NECESSARY BECAUSE IT WILL TAKE YEARS TO DRAW ANY MEANINGFUL CONCLUSIONS ABOUT THE BEARS' ABILITY TO SURVIVE. THE ENTIRE RESEARCH PROGRAM INDEED THE FUTURE OF NORTHWEST MONTANA'S GRIZZLY BEARS HINGES ON FIGURING OUT WHO IS ALIVE AND WHO IS DEAD.

MACE

There's lots of ways to die out here if you're a bear, but the population seems to be doing pretty darn well, pretty resilient right now. When you fly it like we are right now and you can fly from one extreme to the other of grizzly bear habitat and you can do it in about 35 minutes; it gives you an idea really how small the --the area that we have left for grizzly bears in the lower 48 really is.

RATHER (VOICE OVER)

UNFORTUNATELY ON THIS DAY THE BIG CREEK FEMALE WAS NO WHERE TO BE FOUND. FOUR DAYS AFTER SHE WAS COLLARED SHE WAS FOUND NEAR A ROAD SHOT AND KILLED. IT'S ANOTHER CASUALTY FOR A SPECIES THAT COULD BE NEARING THE END OF THE LINE. EVEN WITH RESEARCH, CONSTANT MANAGEMENT AND A GRIZZLY BEAR POPULATION THAT MIGHT BE RECOVERING ENOUGH TO SOMEDAY COME OFF THE ENDANGERED SPECIES LIST. THEIR LONG TERM FUTURE 100 YEARS FROM NOW, 200 YEARS FROM NOW REMAINS VERY PRECARIOUS INDEED.

RATHER (ON CAMERA)

SO WHAT'S HAPPENED SINCE WE WERE ON THE AIR WITH OUR ORIGINAL REPORT? THE LAST THREE YEARS HAS SEEN STEADY GROWTH IN THE POPULATION...ENOUGH FOR SOME WILDLIFE OFFICIALS TO BELIEVE THE GRIZZLY MAY BE READY TO COME OFF THE ENDANGERED SPECIES LIST.

MANLEY

I think we're getting pretty close to delisting on the grizzly bear, the recovery of the grizzly bear. We've got a good population estimate, which we feel is-- is a good number for grizzlies in the-- in the Northern Continental Divide Ecosystem...

RATHER (VOICE OVER)

TIM MANLEY, THE GRIZZLY BEAR SPECIALIST WITH THE STATE OF MONTANA ACKNOWLEDGES THAT THE DE-LISTING ISN'T GOING TO HAPPEN ANYTIME SOON...EVEN THOUGH MORE BEARS KEEP COMING.

MANLEY

We're seeing an increasing trend in the population or-- you know, a growth in the population. You know, grizzly bears-- everybody thinks, "Well, three percent-- that's, you know, not that great." But grizzly bears are slow reproducing species. You know, having an increase in population trend is what we've been striving for. It's taken a lotta years to get there. They've been listed since the mid '70s. And, you know, here we are in 2010, and-- we're still working on trying to get the bears delisted.

RATHER (VOICE OVER)

BUT JUST AS THERE ARE MORE BEARS... THERE ARE ALSO MORE PEOPLE MOVING INTO BEAR COUNTRY. THIS IS WHAT THE BEAR TRACKERS WANT TO AVOID...A BEAR COMING INTO A POPULATED AREA IN SEARCH OF FOOD.

MANLEY

I think in the recent years-- there's been an increase in the tolerance of grizzly bears by the people-- by residents, landowners. Once people understand why bears are in the area or why bears might be attracted to their backyards-- it's not because they're looking to come in conflict with people-- they're just looking for food usually, easy food.

RATHER (VOICE OVER)

THE BEARS ARE CURIOUS CREATURES... AND BIOLOGISTS ARE LEARNING A LOT BY USING REMOTE CAMERAS THAT ARE MOTION ACTIVATED...THESE CAMERAS, WHEN THEY SURVIVE, GIVE REMARKABLE IMAGES OF THE BEARS IN THEIR NATURAL HABITAT. BUT WHEN BIOLOGISTS NEED TO TRAP A BEAR--TO STUDY OR MOVE THEM--THEY HAVE A SOPHISTICATED NEW DEVICE THAT IS LINKED TO A SATELLITE. TIM MANLEY CAN SEE WHAT'S IN THE TRAP WITHOUT LEAVING HIS OFFICE.

MANLEY

This is the automated bear trap; the door is sitting on a pin. When the bear enters the trap, pulls on the bait, the door will drop and then that will trigger email response or a cell phone call to myself and a list of people and then we can get on the internet and we can look at the cameras, which are actually inside the trap to see what's been captured. It saves us time, it saves us money in the long run, but it also lets us minimize, perhaps, the time that an animal spends inside the trap also.

RATHER (VOICE OVER)

AND WHEN THEY NAB A GRIZZLY, THE BEAR PATROL WANTS TO MAKE SURE, FOR THE BEARS SAKE AND THE PEOPLE HE MAY COME IN CONTACT WITH, THAT THEY NEVER MEET AGAIN. INCREASINGLY BEAR SPECIALISTS ARE USING WHAT'S CALLED AVERSIVE CONDITIONING.

MANLEY

Basically what we do is if we capture a black bear or grizzly bear-- and we prefer to do onsite releases, meaning release the bear right at the site where we capture 'em after we've drugged and radio-collared 'em and let 'em come up from the effects of the drug. Upon release we will shoot at the bear with bean bag rounds and rubber bullets-- I have a 12 gauge shotgun-- and then as the bear runs off, we'll follow that up with cracker shells, which explode in the air behind the bear.

RATHER (VOICE OVER)

THE SCIENTISTS HOPE THIS PSYCHOLOGICAL CONDITIONING WILL KEEP THE BEARS AWAY....AND WITH SPECIALLY TRAINED DOGS—THESE WITH SMALL CAMERAS MOUNTED ON THEIR HEADS-- ENCOURAGE THE BEARS TO STAY...BACK IN THE WOODS.

MANLEY

And then as the bear runs off, we'll follow that up with cracker shells, which explode in the air behind the bear. And we use barking dogs. We use people yelling. And then once the bear's moved out-- and given a little bit of a head start, if we deem it

appropriate, we'll go ahead and release the Karelian bear dogs. And they will chase 'em. Usually it's two dogs together. They'll chase the bear off until either-- if it's a black bear, it'll tree. Or if it's a grizzly bear it'll run off. And then once the bear's either treed or moved outta the area, then we'll go ahead and call the dogs back and let the bear move on its own.

DOG HANDLER

Okay, leave it lets go! Leave it, leave it.

RATHER (VOICE OVER)

DESPITE HOW FRIGHTENING IT LOOKS FOR THE BEAR, SCIENTISTS BELIEVE THIS IS ONE OF THE BEST WAYS TO ASSURE THE SAFETY OF THE ANIMAL POPULATION.

A MUCH QUIETER CHANGE IS TAKING PLACE IN THE SWANN VALLEY OF NORTHWEST MONTANA. IT'S CALLED THE FOREST LEGACY PROJECT. IT'S A PROGRAM ADMINISTERED BY THE U.S. FOREST SERVICE AND IT'S MEANT THOUSANDS OF ACRES OF LAND....HAVE BEEN SET ASIDE FROM COMMERCIAL USE. THE LAND IS RIGHT IN THE MIDDLE OF BEAR COUNTRY...AND WILL NOW NEVER BE DEVELOPED.

MANLEY

What that did was it basically took a lotta that private land that was scheduled-- you know, it'd been harvested for timbered, but then was scheduled-- a lot of it-- for subdevelopment and it took it basically out of being subdivided. And for grizzly bears in the Swan Valley, one of the best things that could have happened because it was a large amount of land. And it was prime real estate. And if it had been subdivided, people would of been building a lotta houses down there. And it just would've increased the number of human-bear conflicts in the Swan.

RATHER (VOICE OVER)

AND THERE HAVE BEEN ENCOUNTERS THIS SUMMER. TWO PEOPLE WERE MAULED TO DEATH BY GRIZZLY ATTACKS NEAR YELLOWSTONE NATIONAL PARK.

MANLEY

You know, unfortunate events like this tend to-- polarize people; I guess you could say, in terms of their feelings on grizzly bears. And, you know, there's people that are afraid to camp in the woods because of grizzly bears, are afraid to hike in the woods because of grizzly bears and want every bear removed. And what was also interesting is there are a lotta people that basically felt that these people were in the bears' area and they were

taking risks, and unfortunately a bad event occurred. But why remove the bears because of that?

RATHER (VOICE OVER)

BIOLOGISTS SAY ATTACKS ON HUMANS ARE RARE AND THE YELLOWSTONE INCIDENTS WERE THE FIRST FATALITIES INVOLVING BEARS IN 25 YEARS. BUT AS THEIR NUMBERS CONTINUE TO GROW, TIM MANLEY SAYS MANAGING THE BEAR POPULATION WILL BE THE KEY.

MANLEY

It's taken quite awhile, but I think the outlook, at least for grizzly bears up in this area, is pretty good. We have to be vigilant. You know, we can't just turn our backs and say, "Okay, we did great, and-- everything's going to be fine." We still need to monitor populations. We need to look at trends in population, monitor mortality, identify, you know, where there's been problems with mortality and try to solve those or correct those problems. But I think overall, you know we've made a lot of headway

RATHER (ON CAMERA)

MANAGING THE GREAT GRIZZLY BEAR OF NORTHWEST MONTANA. NOW, COMING UP NEXT...THE MELTING OF A NATIONAL TREASURE AND WHAT THAT MAY TELL US ABOUT THE STATE OF THE WORLD.

WHAT HAPPENED NEXT: MORE MELTING

RATHER (ON CAMERA)

AND NOW AN UPDATE ON A NATIONAL TREASURE... THAT'S QUICKLY DISAPPEARING. THE GIANT ICE FIELDS IN NORTHWEST MONTANA THAT GIVE GLACIER NATIONAL PARK IT'S NAME ARE VANISHING ... FAST... HERE'S A PORTION OF THE STORY THAT WE BROUGHT YOU IN OCTOBER 2008.

RATHER (VOICE OVER)

GLACIER NATIONAL PARK IS A MILLION ACRE WONDER TUCKED BENEATH THE CANADIAN BORDER. THIS IMPRESSIVE TERRAIN HAS LOOKED MUCH THE SAME AS IT DOES TODAY FOR ABOUT THE PAST 10,000 YEARS. THE HABITATS HERE RANGE FROM SHEER MOUNTAIN CLIFF TO STUNNING ALPINE MEADOW. ONE OF THE LOWEST ELEVATIONS IN THE PARK - AT 3,000 FEET - IS NEAR LAKE MCDONALD BUT JUST A FEW MILES AWAY THE ROCKY MOUNTAINS SEEM TO REACH UP AND TOUCH THE SKY AT OVER 10,000 FEET. AND CLINGING TO THE OPEN ROCK FACES OF THE

MOUNTAINS ARE THE NAMESAKE GLACIERS. IT'S HARD TO IMAGINE THESE MASSIVE AND DRAMATIC ICE FIELDS COULD DISAPPEAR IN JUST A GENERATION.

DAN FAGRE, RESEARCH ECOLOGIST AT US GEOLOGICAL SURVEY

What's happened just the last few decades used to take hundreds or thousands of years to occur. So we are experiencing something unusual. After all, these glaciers have been here for 7,000 years and they're about to wink out in the next 12 or 15 years.

RATHER

So what do we got across here?

FAGRE

Well, we have cow moose and her calf.

RATHER (VOICE OVER)

DR. DAN FAGRE WORKS FOR THE U.S. GEOLOGICAL SOCIETY IN GLACIER NATIONAL PARK— THE PARK HAS BEEN HIS CLIMATE CHANGE LABORATORY FOR 18 YEARS.

RATHER

What's the most important thing for us to know about glaciers and climate change?

FAGRE

Well, I think one thing is that the glaciers are clearly receding. And I think you can see this in a number of ways. Perhaps most compellingly is the repeat photography where we take pictures that were taken, say, in 1900 or as late as 1887 and then we go to the exact same spot and take that picture again. It's always a little bit of an adventure finding where one of these photos was taken you know a hundred years ago. And in this case we've got to get across this little swampy area, so here we go.

RATHER (VOICE OVER)

IN 1997 FAGRE STARTED SEARCHING THE NATIONAL PARK SERVICE ARCHIVES AND FOUND OLD PICTURES - TAKEN DURING THE SUMMER - OF THE PARK'S GLACIERS. HE THEN TOOK THOSE PICTURES INTO THE FIELD, AND FOUND THE SAME SPOT THE PHOTO WAS ORIGINALLY TAKEN AND RE-PHOTOGRAPHED THE GLACIERS.

FAGRE

You can kinda start to see the glacier coming into view there.

RATHER (VOICE OVER)

WE HIKED WITH FAGRE TO ONE OF THOSE SPOTS ON A TRAIL BELOW GRINNELL GLACIER.

RATHER

Okay, so what's the significance of this spot? Why are we here?

FAGRE

Well, we finally found the spot where a photo was taken in 1887 of this glacier when it was obviously much larger at that time. And you can see simply from these three photos here that this vast field of ice here where everything is all connected and went almost to the tops to the mountains-- started getting thinner by 1920. But in particular, in the last-- 78 years here, it's completely disappeared. The lower part is completely gone. The upper part separated. And you can see how thin it's become. And so what we'll do is we'll take another photograph of it today and then we'll have one more for our collection and our series that shows, you know, in a visually compelling way how these glaciers have disappeared.

RATHER (VOICE OVER)

GRINNELL GLACIER HAS RECEDED SO MUCH SINCE IT WAS FIRST PHOTOGRAPHED IN 1887 THAT IT HAS SPLIT INTO TWO, SMALLER PARTS. ONLY A SLIVER OF THE ORIGINAL GLACIER CALLED THE SALAMANDER IS NOW VISIBLE FROM THIS REPEAT PHOTOGRAPHY SITE. FAGRE ESTIMATES THAT GRINNELL IS ONLY 10% OF ITS ORIGINAL SIZE.

FAGRE

Of course you set up the camera...

RATHER (VOICE OVER)

FAGRE AND HIS STAFF HAVE REPEATEDLY PHOTOGRAPHED 19 GLACIERS OVER THE PAST 11 YEARS. ALL OF THEM HAVE SHOWN SOME SIGN OF MELTING.

FAGRE

It's a pretty, pretty effective way of doing it. So I'll take a few photos here.

RATHER (VOICE OVER)

AND IT IS NOT JUST THE GLACIERS HERE THAT ARE MELTING – SCIENTISTS AROUND THE GLOBE ARE USING REPEAT PHOTOGRAPHY TO SHOW THE RAPID DECLINE OF THE WORLD’S GLACIERS – THIS IS A MELTING GLACIER IN ALASKA, THIS GLACIER IN PERU IS ALMOST COMPLETELY GONE AND THIS PHOTO SHOWS A GLACIER NEAR MOUNT EVEREST THAT HAS MELTED INTO A LARGE LAKE. FAGRE SAYS ALTHOUGH IT MAY SEEM LIKE A FAIRLY LOW TECH APPROACH TO COMPLICATED SCIENCE; REPEAT PHOTOGRAPHY IS AN INCREDIBLY ACCURATE WAY TO MEASURE THE EFFECTS OF CLIMATE CHANGE.

FAGRE

What they clearly show is that we're seeing a vast change in the glaciers at Glacier National Park. Many of these glaciers are now less than a fourth of the size that they used to be. In fact, when the park was founded we had about 150 glaciers. And now we only have 25. So the vast majority of them have melted in the last century.

RATHER (VOICE OVER)

THE GLACIERS WERE MUCH LARGER WHEN THE FIRST TOURISTS CAME BY RAILROAD TO THIS DRAMATIC AND REMOTE CORNER OF THE NEW AMERICAN NATION AT THE END OF THE 1800’s. THE RAILROAD COMPANIES BUILT THE FIRST LODGES AND CHALETS IN THE PARK AND MOST WERE ACCESSIBLE ONLY BY HIKING TRAILS OR HORSE. IN 1910, AS THE NUMBER OF VISITORS CONTINUED TO CLIMB, PRESIDENT TAFT SIGNED A BILL MAKING GLACIER THE 10TH NATIONAL PARK. AND SHORTLY AFTERWARD WORK BEGAN ON A MUCH NEEDED INTERIOR PARK ROAD.

RATHER (ON CAMERA)

THIS IS LOGAN PASS, NAMED AFTER THE PARK’S FIRST SUPERINTENDANT. AND THIS IS THE FAMOUS GOING-TO-THE SUN ROAD THAT CROSSES THE WINDY CONTINENTAL DIVIDE. THE ROAD STRETCHES FOR 50 MILES ACROSS THE ENTER OF THE PARK. IT’S A NATIONAL HISTORICAL MONUMENT- STILL CONSIDERED TO BE AN ENGINEERING MARVEL JUST AS IT WAS WHEN IT FIRST OPENED TO THE PUBLIC IN 1933.

RATHER (VOICE OVER)

TODAY MORE THAN TWO MILLION VISITORS A YEAR TRAVEL THE DRAMATIC GOING-TO-THE SUN ROAD TO SEE THE FAMOUS NAMESAKE GLACIERS. THE GLACIERS ARE GEOLOGICAL PHENOMENON THAT FORMED WHEN MORE WINTER SNOW FELL IN THE HIGH MOUNTAINS THAN MELTED

IN THE SUMMER. OVER TIME THE BOTTOM LAYERS OF THESE SNOW MASSES TURNED TO ICE. AS THE ICE THAWED AND FROZE THROUGH THE SEASONS IT WOULD SHIFT AND GRIND AWAY AT THE ROCK UNDERNEATH - SHAPING THE DEEP, PICTURESQUE VALLEYS OF THE PARK. THESE GIANT MASSES OF SHIFTING ICE AND PACKED SNOW HAVE TO BE AT LEAST 25 ACRES AND 100 FEET THICK TO BE CONSIDERED A GLACIER.

SCIENTIST

So the transmitter is on?

RATHER (VOICE OVER)

IN ADDITION TO PHOTOGRAPHING THE GLACIERS, FAGRE AND A TEAM OF SCIENTISTS AND STUDENTS SPEND WEEKS EVERY SUMMER ON THE GLACIERS TAKING PRECISE MEASUREMENTS WITH A GPS SYSTEM. THEY USE RADAR TO CALCULATE THE DEPTH OF THE GLACIER AND THE SNOW ON THE GLACIER.

SCIENTIST

The reason we want to get the thickness of the ice is so that we can calculate the volume of ice that's currently in the glacier and then we can also calculate the volume of ice that's has gone away.

RATHER (VOICE OVER)

A WEATHER STATION MEASURES SNOW FALL AND TEMPERATURE CHANGES. THE GOAL IS TO DETERMINE HOW MUCH AND HOW FAST THE GLACIERS ARE RECEDING AND HOW MUCH WATER THE GLACIERS STILL HOLD. EACH SUMMER GLACIAL MELT SENDS MILLIONS OF GALLONS OF FRESH WATER DOWN THE MOUNTAIN SIDE. ECOLOGIST DAN FAGRE SAYS THIS WATER IS VITAL.

FAGRE

50 percent of the water that humans consume on this planet comes from mountain regions. And here in the American west, that figure is even higher. It's 85 percent. As a glacier-- disappears it-- it means that usually the snow packs are disappearing as well. And because snow packs act as sort of our reservoir system-- we're basically losing our reservoir system. The snow pack is been declining for about 50 years. So we have less and less every winter, and it melts up to a month earlier in the spring and so by mid-summer when we used to still have some snow around most years the snow pack is depleted.

RATHER (VOICE OVER)

GLOBAL WARMING BY ITS VERY DEFINITION IS GLOBAL. AND SCIENTISTS LIKE DAN FAGRE ARE COMPARING THE CHANGES HERE TO WHAT IS HAPPENING AROUND THE WORLD.

FAGRE

Almost all mountain glaciers on this planet are melting. People understand that when temperatures go up ice melts. And so that's basically a barometer. But, the rest of the system is also responding to increasing temperatures as well. And so you have a lot of plants and animals that are kind of following what the glaciers are doing. But it's much easier to see when you look at a glacier.

RATHER (VOICE OVER)

AS THE CONSEQUENCES OF GLACIAL MELT RIPPLE ACROSS THE EARTH, FAGRE SAYS THE VISUAL SHOCK OF THE MELTING GLACIERS SHOULD MAKE PEOPLE STOP AND MAYBE TAKE THE FIRST STEP TOWARDS CHANGE

FAGRE

Part of the message here is that people can come here, they can see climate change. They can believe it. It's a lot-- easier to try to think about how you're gonna change your lifestyle, for instance, when you feel like you have a very personal reason to do that. And that personal reason for a lot of people is coming to Glacier National Park and seeing the changes that climate change has basically imposed on this landscape.

RATHER (ON CAMERA)

DAN FAGRE IS CONTINUING HIS GLACIER RESEARCH - HE AND HIS TEAM ARE GETTING READY TO HIKE UP TO THE GLACIERS TO TAKE ANOTHER ROUND OF REPEAT PHOTOGRAPHS AND ASSESS HOW MUCH THEY'VE CHANGED SINCE LAST SUMMER. HE'S ALSO KEEPING RECORDS OF THE TEMPERATURE INCREASES IN GLACIER NATIONAL PARK. HIS LATEST FINDINGS DO NOT BODE WELL

FAGRE

My staff and I have produced a report showing that the temperatures here in western Montana have increased by 1.8 times the global average, so just about double what's going on the rest of the planet. And so consequently, the glaciers are responding as well. And so we have a number of things that we've seen the last couple years, one of which is that we recently released a fact sheet showing that there's only 25 glaciers still in the park that are 25 acres or larger. And 25 acres is what we kind of use as a threshold for a small

glacier; when they get smaller than that, they're really not moving much, which is one of the things that defines a glacier, is moving ice.

RATHER (VOICE OVER)

THIS TEMPERATURE INCREASE MAY HAVE LEAD TO A MASSIVE GLACIAL COLLAPSE - A RARE EVENT THAT INDICATES JUST HOW REAL AND IMMEDIATE THIS CRISIS IS. THE COLLAPSE WAS CAPTURED IN THIS PHOTOGRAPH BY A HIKER. BUT BECAUSE OF CONTINUOUS BAD WEATHER ON THE HIGH MOUNTAINS IT WAS TWO YEARS BEFORE DAN FAGRE COULD MAKE THE TRIP TO SEE THE DAMAGE UP CLOSE.

FAGRE

Well one of the things that we found in 2007 from a photo that a fellow sent us was that there'd been a big-- collapse of part of Blackfoot Glacier. And so this had created a little avalanche of ice, debris, and so forth. And interestingly, this part of the glacier had sheared away entirely, and it was about 25 acres in size. And since that's one of the definitions of one of our small glaciers, we basically lost one small glacier's worth of ice out of Blackfoot Glacier in one catastrophic event that nobody saw. This kind of collapse behavior has not been seen in Glacier National Park before. At least it's not been documented.

RATHER (VOICE OVER)

AND BLACKFOOT GLACIER IS JUST ONE OF MANY FORMATIONS THAT FAGRE SAYS HAS UNDERGONE DRAMATIC CHANGES IN RECENT YEARS. THE SAME GLACIER WE VISITED IN 2008 - GRINNELL - IS ALSO SHOWING SIGNS OF ACCELERATED MELTING.

FAGRE

Grinnell has exceeded our expectations in just the last eight years. We've had 18 percent of the glacier disappear.

RATHER (VOICE OVER)

LAST SUMMER FAGRE AND HIS TEAM CARRIED RAFTS AND OTHER EQUIPMENT UP TO THE LAKE AT THE BASE GRINNELL GLACIER. THEY WANTED TO TAKE SOME MEASUREMENTS AT THE VERY EDGE WHERE THE ICE MEETS THE WATER. BUT WHAT THEY FOUND ONCE THEY GOT OUT ON THE LAKE SURPRISED THEM.

FAGRE

One of the interesting things we saw was that-- the front of the glacier that's pushing into the lake was actually a little bit hard to distinguish because there's so many icebergs had broken off and actually drift around a l-- in the wind, and they kinda come back and touch the glacier. And-- if you had wanted to, you could have practically walked across the lake on top of the icebergs. There were so many of them.

RATHER (VOICE OVER)

FAGRE BELIEVES THAT THIS WARMING TREND HAS CONTINUED TO SPEED WELL BEYOND HIS ORIGINAL PREDICTIONS. AT THE TIME OF OUR FIRST REPORT, FAGRE HAD COLLABORATED ON A COMPUTER MODEL THAT PREDICTED THE DISAPPEARANCE OF BLACKFOOT AND OTHER GLACIERS BY 2030. TODAY, HE THINKS THAT COULD HAPPEN MUCH SOONER.

FAGRE

Right now, that 2030 date is probably conservative. It'll probably be earlier unless we see some reversal in upward trend in temperatures. When we built that model, we used the best projections at the time. But since that time, reality has-- outpaced what we put in there as a scenario, and the glaciers have responded accordingly. So most of the glaciers that we've looked at are continuing to melt at a more rapid rate than what we've projected. So, therefore, it's logical that it'll be before 2030 unless we see some kind of cooling of temperatures. You know it could be-- 2024, 2025. It's still remarkable because these glaciers have been on this landscape for thousands of years. So we can quibble about whether it's this year or that year and exactly what's a glacier, but-- the basic thing is ice is disappearing quickly.

RATHER (VOICE OVER)

AND WITH THE PARK IN ITS CENTENNIAL YEAR, THE NAME MAY SOON NOT REFLECT THE REALITY OF WHAT'S LEFT HERE.

FAGRE

Since 1966-- we've had some of our glaciers-- shrink by 72 percent. Some of them have actually shrunk to the point that there's virtually nothing there. And so we're really not calling 'em glaciers anymore. They're just little slivers of ice crowded under a cliff. And so we've-- seen more glaciers disappear since 1966. Of course-- we had about 150 in 1850. Probably most of those are still around 1910 when the park was formed. And we are looking at the-- centennial Glacier National Park this year. And now we have about 25 left.

RATHER (ON CAMERA)

...DAN FAGRE IN GLACIER NATIONAL PARK MONTANA. AND THAT'S OUR PROGRAM FOR TONIGHT. FROM NEW YORK, FOR HDNET, DAN RATHER

REPORTING. GOOD NIGHT.