

WILD HOPE

Unleaded

	TIME CODE	VIDEO	AUDIO
	01:00:00:00		<p>HANNAH LEONARD:</p> <p>I was hunting a few years ago in Montana and I actually found a golden eagle that at the time I thought was electrocuted. When I got it to the Raptor Rehab Center, she called me later and said, "Hey, you know, this bird has lead poisoning from gut piles with all these lead fragments in it." These migrating scavengers come in and they're gonna gorge themselves on it. Immediately that day I went and switched to a lead-free bullet. It was a really visceral experience and I don't know how anyone could not change after seeing that kind of thing.</p>
	01:00:35:11	Title	WILD HOPE: UNLEADED
	01:00:43:01 01:00:43:18	LOWER THIRD: BRYAN BEDROSIAN, RAPTOR ECOLOGIST	<p>BRYAN BEDROSIAN:</p> <p>Raptors are some of our most iconic wildlife species. We've got eagles, hawks, falcons, harriers, osprey, and owls.</p>
	01:00:54:18		<p>VO:</p> <p>RAPTOR ECOLOGIST, HUNTER AND CONSERVATIONIST BRYAN BEDROSIAN IS NO STRANGER TO THESE MAGNIFICENT BIRDS OF PREY. BUT AFTER TWO DECADES OF STUDYING THESE PREDATORS IN THE GREATER YELLOWSTONE ECOSYSTEM, HE HAS A FAVORITE.</p>
	01:01:11:07		<p>BRYAN BEDROSIAN:</p> <p>Golden eagles, besides for the fact that they're ridiculously cool and amazing creatures, are really good indicators of ecosystem health.</p>

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01:01:20:14		VO: AS PREDATORS AND SCAVENGERS, THEY'RE VULNERABLE TO POLLUTANTS THAT CAN GET INTO THE FOOD CHAIN.
01:01:29:01		VO: IN THE 1940S THROUGH 60S, EAGLE POPULATIONS WERE DECIMATED BY THE PESTICIDE DDT. WHEN THEY ATE PREY CONTAMINATED WITH IT, THE DDT AFFECTED THEIR REPODRUCTION, CAUSING THINNER EGG SHELLS AND FEWER HATCHLINGS.
01:01:48:10		BRYAN BEDROSIAN: And once we identified that and removed that from the system, those populations were able to rebound.
01:01:55:09		VO: TODAY, GOLDEN EAGLE NUMBERS IN THE WESTERN UNITED STATES HAVE BOUNCED BACK TO BETWEEN 20 AND 30 THOUSAND, BUT THEY STILL FACE SIGNIFICANT THREATS. BRYAN IS CONCERNED ABOUT ONE IN PARTICULAR
01:02:11:20		BRYAN BEDROSIAN: One of the things we've been looking at for years is the incidence of lead poisoning. I can tell you firsthand, it is ridiculously saddening to walk up on one of the most iconic species in the world, face down in the dirt wings spread open, and you know that bird suffered to death.
01:02:33:04		VO: THROUGH LONG-TERM STUDIES, BRYAN HAS DOCUMENTED WHAT HAPPENS WHEN EAGLES ACCIDENTALLY INGEST LEAD FRAGMENTS.
01:02:41:15		BRYAN BEDROSIAN:

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			<p>The hunter uses a lead-based bullet. When that bullet collides with the animal they're hunting, the deer, the elk, the antelope, it releases about 40% of that lead. And that lead just gets dispersed like a dust cloud within that animal up to 18 inches surrounding the trajectory of that bullet. We don't want to take the guts home with us because that's not what we're going to eat. We leave that for the animals out in the field.</p>
	01:03:09:10		<p>VO: SCAVENGERS LIKE EAGLES AND CRITICALLY ENDANGERED CALIFORNIA CONDORS FEED ON THESE GUT PILES AND CARCASSES.</p>
	01:03:19:05		<p>BRYAN BEDROSIAN: It will shut down their digestive system.</p> <p>It will ground the eagle so it can't fly anymore.</p> <p>Its kidneys can fail, it can cause paralysis, blindness, seizures.</p>
	01:03:31:00		<p>VO: AND EVEN DEATH.</p>
	01:03:35:15		<p>VO: STUDIES SHOW THAT NEARLY HALF OF GOLDEN AND BALD EAGLES IN THE UNITED STATES HAVE ELEVATED LEVELS OF LEAD IN THEIR BLOOD.</p> <p>IT'S ALSO THE LEADING CAUSE OF DEATH IN CALIFORNIA CONDORS, WHOSE POPULATION ONCE REACHED AN ALL-TIME LOW OF 22. CAPTIVE BREEDING HAS SAVED THEM FROM EXTINCTION, BUT THE THREAT REMAINS.</p>
	01:04:05:23		<p>VO: BRYAN AND HIS COLLEAGUES ARE ON A CRUCIAL MISSION TO PROTECT EAGLES AND OTHER RAPTORS FROM LEAD POISONING.</p>

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			THEIR JOB REQUIRES CONSISTENT MONITORING OF THE BIRDS.
01:04:19:03	GFX: Map showing golden eagle migration in North America.		BRYAN BEDROSIAN: We are on we call the Golden Eagle Highway. So thousands of eagles are migrating down here into the United States from Canada and Alaska.
01:04:29:10			VO: SAFELY CATCHING A GOLDEN EAGLE IS A CHALLENGING TASK. THEY CAN SEE PREY– AND SUSPICIOUS HUMANS–FROM MILES AWAY.
01:04:39:22			BRYAN BEDROSIAN: We show them some bait, and then they'll come to get a meal.
01:04:44:20 01:04:45:23	LOWER THIRD: ROB DOMENECH Raptor Ecologist		ROB DOMENECH: And we just have two, two nets out there. One blind, one box on the mountain, and very dedicated crew and amazing things are happening.
01:04:54:14			STEP WILSON: <i>I got an eagle down mid-valley. It's circling, young one. Rising up.</i> BRYAN BEDROSIAN: <i>Alright.</i> STEP WILSON: <i>Starting to slide over to the ridge. Coming onto blow-out. Alright.</i>
01:05:41:08			BRYAN BEDROSIAN: <i>Georgia, get down!</i>
01:05:52:05			VO:

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		ONCE THE EAGLE IS SAFELY CAPTURED, BRYAN PLACES A HOOD OVER HER EYES TO HELP CALM HER DOWN.
01:05:59:08		BRYAN BEDROSIAN: <i>Alright, got her.</i> When you've got a species that migrates across the continent, it takes a lot of data to really understand what's going on.
01:06:13:11		VO: BRYAN AND HIS TEAM CAREFULLY BAND THE BIRD, COLLECT MEASUREMENTS
01:06:18:08		BRYAN BEDROSIAN: One, two, three, go.
01:06:20:15		AND MOST IMPORTANTLY, TAKE A SMALL BLOOD SAMPLE TO CHECK FOR LEAD. HE'S NOTICED SOME CONSISTENT TRENDS
01:06:31:00		BRYAN BEDROSIAN: Literally the opening weekend of big game season, those lead levels skyrocket. After hunting season's over, we know that the lead levels drop because there's no more gut piles.
01:06:42:02		VO: A CLEAR CORRELATION.
01:06:45:11		BRYAN BEDROSIAN: The way lead works is if just like the bird, if I eat lead, it's gonna circulate in my blood for two weeks, and then it will go into my tissues, and then it will be absorbed into my brain and bone marrow for the rest of my life.
01:06:58:02		VO: IF THERE ARE HIGH LEVELS OF LEAD IN THE BLOOD, IT MEANS THE BIRDS HAVE INGESTED IT RECENTLY.
01:07:05:06		BRYAN BEDROSIAN:

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			We identified the problem in eagles. And as a biologist and as a scientist, I published those papers.
	01:07:12:09		VO: BUT THAT WAS JUST STEP ONE. IN ORDER TO REDUCE THE RAPTORS' EXPOSURE TO LEAD, HE NEEDED TO SPARK BEHAVIOR CHANGE – CONVINCING HUNTERS TO SWITCH TO LEAD-FREE AMMUNITION.
	01:07:25:01		BRYAN BEDROSIAN: Fast forward 10, 15 years, we have states that have mandated lead-free, and it's become a very divisive topic. It's us versus them. It's a hunters are bad or they're trying to take my guns. I'm a huge hunter, I'm a conservationist, and I just knew the right answer, which was education. And so I started Sporting Lead-Free.
	01:07:52:17		VO: SPORTING LEAD-FREE IS A GRASSROOTS, HUNTER-LED INITIATIVE TO ENCOURAGE USE OF NON-LEAD AMMUNITION SUCH AS STEEL, BRASS, OR COPPER
	01:08:06:09 01:08:17:20	LOWER THIRD: HANNAH LEONARD, SLF PROGRAM DIRECTOR	HANNAH LEONARD: I didn't get into hunting until my adult age. They call us adult-onset hunters. In Sporting Lead Free, I've found so many other hunters who have the same value system wanting to be out there to connect with our ecosystem and our food. We like to say that hunters are the original conservationists. And so to make that true, we need to be aware of what's happening beyond the bullet.
	01:08:32:18		VO: BRYAN AND HANNAH HOST EDUCATIONAL WORKSHOPS, PARTNER WITH NATIONAL

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		SPORTING GOODS RETAILERS, AND RECRUIT AMBASSADORS TO RAISE AWARENESS ABOUT LEAD-FREE OPTIONS.
01:08:45:02		<p>HANNAH LEONARD: Most of the time we're not learning about this in hunter education and so that's where we're coming in.</p> <p>If you have a bunch of lead ammunition, use that at the range, but as soon as that's gonna hit the ecosystem in any way, that's when we ask you to switch to a lead-free alternative.</p>
01:09:00:18		VO: THEY USE BALLISTIC DEMONSTRATIONS TO SHOW HUNTERS WHY LEAD BULLETS CAN DO SO MUCH DAMAGE.
01:09:08:07		<p>HANNAH LEONARD: Most hunters don't actually go to the range and shoot ballistics gels. We shoot at paper. And so a lot of folks don't realize that lead ammunition fragments.</p> <p>When a lead bullet hits its target, lead is really soft. So it begins to fragment into hundreds, if not thousands of tiny pieces as it goes through that animal.</p>
01:09:27:19		VO: COPPER, WHICH IS GROWING IN POPULARITY AS A NON-LEAD ALTERNATIVE, OFTEN STAYS IN ONE PIECE.
01:09:35:21		<p>HANNAH LEONARD: From a performance standpoint, you don't want your bullet to fragment. You want it to stay together to get the most ethical kill.</p>
01:09:48:02		VO: UNDER AN X-RAY, THE DIFFERENCE IN FRAGMENTATION IS EVEN MORE CLEAR.

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01:09:52:17		<p>BRYAN BEDROSIAN: This is the ballistics gel on top that we shot with the lead bullet. It's all those microscopic little fragments.</p> <p>The greatest concentration of that lead is right at that entrance and that exit. And that's where the birds are feeding because they can't get through the hide.</p>
01:10:09:11		<p>HANNAH LEONARD: In this red circle here, that's 20 milligrams of lead, that is enough to kill an adult bald eagle. And when we think about how much of those can get left in a gut pile, it's pretty eye-opening.</p>
01:10:23:06		<p>VO: LEAD CAN ALSO END UP IN THE MEAT HUNTERS BRING HOME.</p> <p>CONSUMPTION OF THE TAINTED MEAT CAN LEAD TO SPIKES IN BLOOD LEAD LEVELS AND POTENTIAL HEALTH RISKS.</p>
01:10:35:11		<p>BRYAN BEDROSIAN: As your young kids or kids in utero are developing, that's where the greatest risk is.</p>
01:10:45:00		<p>VO: AS AN ALTERNATIVE THAT'S SAFER FOR BOTH PEOPLE AND BIRDS, COPPER BULLETS HAVE COME A LONG WAY SINCE THEY FIRST ARRIVED ON THE MARKET.</p>
01:10:54:13		<p>BRYAN BEDROSIAN: The development of lead-free options has skyrocketed.</p> <p>Just like any technology, that technology is evolving, it's getting better, it's getting cheaper, and</p>

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			we're at the point now where we have great copper, and other lead-free alternatives.
01:11:10:19			VO: BECAUSE OF PUBLIC AWARENESS CAMPAIGNS LIKE SPORTING LEAD-FREE, MANY MAJOR MANUFACTURERS NOW PRODUCE NON-LEAD AMMO IN A WIDE VARIETY OF CALIBRES.
01:11:20:11			SOL GRIFFITH: ...dialing in your hunting rifle for copper.
01:11:24:04			BRYAN BEDROSIAN: For years I handed out free and discounted non-lead ammunition to hunters. The first year 25% of hunters used non-lead ammo, guess what? The eagle lead levels dropped by 24%. The next year, 32, 33%. We know it works.
01:11:40:18			VO: AND THEIR MOVEMENT IS GROWING.
01:11:44:04			HANNAH LEONARD: I believe we're in 47 of the 50 states. We have members not only in the United States but in Canada, Australia, Italy. It is a worldwide issue and the fact that we're really getting that messaging in the United States to take off has been awesome.
01:12:02:06			ROB DOMENECH: It's hard to wrap around solutions for a lot of major conservation issues. But here, as individuals, we can make a difference.
01:12:09:12			BRYAN BEDROSIAN: And that's what gets me out of bed every day, knowing that everything we do to use lead free options out there is helping a bird. That gives me a ridiculous amount of hope.