TRANSCRIPT
INTERVIEWEE: **Al Brothers** (AB)
INTERVIEWERS: David Todd (DT)
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0:01:04 – 2075
AB: How you would set a program like that up I said well there's a—he said we're going to have to fund it with just state money without using federal funding. I said well as a starter you need one biologist just like that for each region in the state you know the state is divided into regions…I said you need one biologist…
(misc.)
DT: My name is David Todd, I'm here for the Conservation History Association of Texas and it's February 22, the year 2000 and we're in Berclair, Texas, near Beeville and we've got the good fortune to be talking to Al Brothers who's been a wildlife manager, a cattle rancher and a consultant in those fields for many years, and I wanted to thank you for spending some time with us.
0:01:58 – 2075
AB: My pleasure.
DT: Thank you. I wanted to start by asking you a little about your—your early years, your childhood and whether there might have been anybody that got you interested in the outdoors and conservation, wildlife and so on?
0:02:13 – 2075
AB: Well I was born and raised in Gonzalez County, which is about 100 and—oh about 80 miles to 100 miles from here to where I was born. On the Guadalupe River—has a river bottom it had all types of wildlife including deer. My dad had inherited the ranch from his mother's side of the family, and my uncle had the ranch right next to it and my great uncle on the other side. So, I grew up around wildlife and fishing and going squirrel hunting and so forth and that's where my interest came from. And I started at a very early age following my dad around and those various activities, so you could say probably my family experiences is what got me interested pers—personal experiences, being raised in a rural setting with—with all of those things.
DT: I understand that you were—when you were a schoolboy you also worked on ranches in other parts of Texas?
0:03:11 – 2075
AB: As I was growing up my first steady job was with a local cattle commission company on the weekends where they sold cattle on Saturday at the local commission company and I worked there until I graduated from high school every Saturday and Saturday night and

sometimes on Sunday. And then during the summers I worked on some fairly large cattle operations and one in particular in the early 50's in 1953 to 1955, I was a cowboy on the Old Six ranch at Alpine Texas, which is known as the Coconut ranch, which is—my cousin owned—my—my grandmother was a Coconut and it was just like cowboying at the turn of the century like 1900 you rode in pairs, you rode the long miles everyday, you had your own string of horses and you doctored the cattle for screwworms where you found them, it might be 50 miles to the nearest set of corrals, that's one reason you rode in pairs the other is because it's such a big country if anything happened to you they may not find you for a few days.
DT: And in—in later years you went on to Texas A&M, is that right?
0:04:17 – 2075
AB: That's right, I—I left High School and went to Texas A&M. At that time Texas A&M, was all male school it was all corps unless you were a foreign student, or veteran or physically disabled you were in the corps and I signed a contract at the end of my sophomore year with the US army and got a little bit of money for my last two years—having that contract with the US Army helped toward my education and of course when I graduated I had—I had an obligation—I served two years in the Army in artillery by the way, and then when I left the Army I came back and went to work for Texas Parks and Wildlife Department.
DT: And before you got out of school what were you studying at A&M?
0:05:00 – 2075
AB: Wildlife Management. I went to Texas A&M because first, I liked the school, plus it was the only school at that time in the state that I knew of, and as far as I know in 1956 it was the only school that offered a four year degree in Wildlife Management. And that department was started I think in 1938 by Dr. W.B. Davis and was the first Wildlife Department in the State of Texas in any college.
DT: And was this—I—I had a question—I understood that there was a wildlife program at the University of Wisconsin in the 20's and 30's that Aldo Leopold taught at?
0:05:44 – 2075
AB: Oh yes.
DT: And was this one of the first programs after Wisconsin?
0:05:48 – 2075
AB: Aldo Leopold—Leopold was considered the father of modern day Wildlife Management and he's the one that we still look back to for inspiration and guidance, but A&M was the first college in Texas that offered it and it was started in 1938 at A&M.
DT: And then so after you got out of A&M you said you went to work for Parks and Wildlife?
0:06:14 – 2075
AB: After the service, two years in the service. I worked at Parks and Wildlife.
DT: And what sort of work did you do there?
0:06:21 – 2075
AB: I was a field boy just on what we call a—a Pittman Robinson funded project which included numerous counties—a number of counties from the Rio Grande up into the edge of the Edwards Plateau. And basically we—our responsibilities—there was some research involved, but the majority of it was setting seasons, bag limits—from the data we collected in these counties we set seasons, bag limits and made recommendations, means and methods of taking and so forth.
DT: This is on—on birds?

0:06:58 – 2075
AB: On everything
DT: Everything
0:07:00 – 2075
AB: Everything. Everything that has a bag limit or a season on it we—we were inventorying it censusing it and in some cases issuing permits, that was in the days of the old antlerless deer permit that we issued at the courthouses, based on the censuses in each county, and we would have to go to each county courthouse of the counties we were responsible for and issue the permits each year in the fall. Of course we had to take censuses, too, to know on what basis we issued them because different—different counties and different parts of counties had different issuance rates. It was pretty complicated policy and took a lot of manpower and time.
DT: Was there much understanding and respect for the game laws at that time and the whole practice of issuing permits?
0:07:50 – 2075
AB: The—the whole basis of permits at that time, which was initiated back in the 50's and I was working there in the 60's, was if you go back far enough, back into after world war II there were a lot of areas in Texas or good deer habitat with no deer in them and shortly after the war and particularly in the 50's—early 50's there was a concentrated effort of the old game and fish commission, which is now the Parks and Wildlife Department to trap, and transplant, relocate White Tail Deer into suitable habitats throughout the state and most of these deer were trapped on the King Ranch in the Welder Wildlife Refuge and there was—there was an effort to trap and transplant to suitable areas Mule Deer too. In fact, the guy that was in charge of most of the trapping in those days of 50's and into the 60's was a guy named Emmett Smith, who's no longer with us, but he did a lot of it.
DT: And why were the deer so depleted at the end of World War II?
0:9:05 – 2075
AB: Basically unregulated hunting. A number of reasons, unregulated hunting subsistence hunting, in other words. Not so much the hunting we know of today for sport, but subsistence—people actually eating them you know, year around basis, in some cases high predator population contributing factor to it. For the most part though, it was excessive hunting pressure. Now that excessive hunting pressure might have taken place back in the 20's and 30's, and what it did it brought the population down to a threshold level where they couldn't recover. The numbers were so small they couldn't recover from all the factors that impacted them. So, once they got down to a certain level they could never recover without the—the season being closed and new brood stock being brought in.
DT: Did most of the land owners and citizens in these towns understand why you were issuing permits and—and believe in…
0:10:08 – 2075
AB: It was a highly controversial program and it was hard to administer. It took a lot of man hours and you can imagine doing it on a countywide basis, how within a given area you had to delineate on a map certain areas for certain issue rates and it had to be delineated by known landmarks like a highway or a farm(?) market road or a county road or a creek or a river could be a boundary of one of those areas and naturally within an area that large you had some that probably shouldn't have had the same rate of issuance we had to issue within that block and some that needed more and some that needed less but that was one

of the—one of the phases of the system because you couldn't go to each individual land ownership and survey it had to be done on a—on a much larger scale.
DT: You mentioned surveys could you talk about how censuses were done back then?
0:11:09 – 2075
AB: Well for years and years we had what we called a Hahn Census line, which was a walking line and I won't go into a lot of detail but it's basically a—a walking census line, where you measure the visibility and a man walked it at a certain period of the day, and a certain length and you had—you had measured the visibility of it ahead of time and then you divided the number of deer seen into the acreage of visibility on that particular line. And when I went to work in the early 60's—'63 we were experimenting in South Texas where you have—where you don't have the canopy cover you do in say Eastern State part of the state or areas with a high canopy cover, but low brush, we were experimenting with aerial deer census and I flew a lot of those experimental lines back in those days and today that is THE established method of the Parks and Wildlife uses census of South Texas low brush country area of counties. It's been in use since those days, they—they abandoned the Hahn (?0:12:14) census lines and went to the aerial census. And, of course, private land owners now use a helicopter to—to census individual ranches, but the state uses fixed wing because they have to do it on a county basis. And basically, what they do is they checkerboard the county North, South, East, West with lines spaced so many miles apart, and they use checkpoints along those lines and—and they're able to bring it down into blocks that are pretty accurate on census on buck-doe ratios and fawn and (?0:12:43) ratios.
DT: You said that—that the permit system that the census…
0:12:50 – 2075
AB: Is no longer with us…that was abandoned too.
DT: I see.
0:12:55 – 2075
AB: What they've gone to and the way they control it now is they—they'll open up antlerless deer season for so many days and in some particular counties it may be closed North of one highway or North part of the county and open for so many days in the South part, and then in some areas where you have a high deer distance it's open and you just use the tag off your license. Now, there are some special programs been developed by the state in the last few years called the Managed Land Deer Permit and so forth, where there are some permit—permits involved with that but it's—we don't really have t—time—you need to speak to someone in Parks and Wildlife to speak officially on those programs. But it—the permit program is—is something that's a specialized type program now it's not used on large acreage basis like it used to be.
DT: Did you see much problem with poaching during the years you were with Parks and Wildlife?
0:13:55 – 2075
AB: Let's turn that term around and say illegal harvesting of game of any type, and particularly when it comes to big game animals and White Tail Deer, I think the magnitude of the problem is far greater than most people would like to admit to.
DT: And this is…
0:14:14 – 2075
AB: And now they have much more sophisticated tools to make themselves more successful

at it. You got a—a GPS global positioning satellites and cellular phones. A guy can go out on Lloyd's ranch—position it—take—take an animal, cut the head off if he's interested in the trophy part of it, tie it up in a tree with wire where the predators can't get to it—coyotes or anything drag it around. Take the reading on his global positioning sat—GPS exactly where he's at, leave, come back three months later, use his cellular phone when he gets to the highway to call the guy to pick him up at—after dark and come back three months later and retrieve the head. Plus, you have night scopes now, you have the ability to shoot deer at night though a—through a—a scope on a rifle that has night vision or you have goggle—you have specialized stuff that military developed where you can see at night and there are so many new things that—that can be of aid to the poachers that—that if they're willing to spend the money and the time, they're almost impossible to catch.
DT: After you worked for Parks and Wildlife and this hunting regulation area you went on to work for The Zachary Ranch, is that right?
0:15:41 – 2075
AB: Zachary Ranches, which encompassed from two to four ranches depending on what time of the 30 years I worked for them you're talking about.
DT: And what sort of work did you do for them?
0:15:55 – 2075
AB: I managed the wildlife the range and the cattle operation plus some farming—irrigated farming.
DT: And what sort of goals did you have for the ranches?
0:16:07 – 2075
AB: The number one goal the wildlife came first, the livestock was secondary.
DW: Back to the illegal taking, did you ever accidentally or run into someone in the act of doing this and did you say, like, "Stop or I'll shoot?"
0:16:27 – 2075
AB: In about the mid '70's I went to Deputy Game Warden School because anyone with any quality wildlife has a problem with trespassers and poachers. I've caught—I've caught a few through the years and have been in some pretty tickly situations with them through the years. But I went through Deputy Game Warden School in 1974.
DT: Can—can you maybe describe some of those ticklish situations? You don't have to give me the names.
0:16:55 – 2075
AB: Well, probably the—the most tense situation I was ever in is—we had a neighbor that owned a small place—had married a woman that had a small place that bordered us. And he put his deer blind right on the boundary fence on top of a hill where he could look over into a—into a draw on our side that went to a water hole where there was a lot of activity. And we discovered where they had taken deer on our side of the fence, cut the fence and taken them out. So I began to watch it fairly regular on that side, and one morning as I came by this deer blind that was on our fence line but on his side of the fence, just before daylight there was someone sitting in it, so I decided I'd just stay there. So I just parked right 30 yards from it on my side of the fence from the blind and sat there, but when it got daylight I recognized the guy that—and everybody had warned me about him, how he had pulled guns on people and put guns to people's head and so forth in the past to—to be careful around him. So we sat there and looked at each other until about 8:30 in the morning. And he climbed down—it was an elevated stand—and he climbed—there about 8:30—he

climbed down on the stand, leaned his rifle in the corner—that was one of the supports, took his coat and he had on a pair of coveralls, took them off. Walked over to his pickup, which I'm looking at parked in the brush about 30 yards away, facing away from me—walked over to his pickup, opened the door, pulled the seat back and took a pistol out—a revolver. Loaded it, turned around and walked back toward me, holding the pistol. Well, when he got up about 10 feet from the fence he stopped. And all this time I'm watching, not him, but specifically his elbow that's holding the pistol, and I'd already made up my mind that if I saw the elbow bend and he started up with the pistol I was planning on shooting first. But he stood there about 30 seconds looking at me and turned around and went and got his stuff and went and got in his truck and left.
DT: He blinked.
0:19:25 – 2075
AB: Can you stop it a minute?
DW: I got a package delivery here.
0:19:29 – 2075
AB: That's alright. I—I put a lot of Peyote poachers in jail through the years.
DT: Could you briefly tell us about the Peyote issue, or term? I think it's interesting, as an endangered species it's kind of a funny fluke story. Could you explain pretty much…
0:19:48 – 2075
AB: I even wrote a letter to the—at—the—I can't even remember the girl's name, she was the head of—head of—she was in charge of the Parks and Wildlife Department policy on endangered species at that time. That's been a good many years ago. And she came down and looked it over but—politics, you know—politics is heavily involved in the issue of peyote because of the Indian situation. But Peyote is definitely an endangered plant species in the United States. The only—only place in the United States a viable population is found is in parts of four counties in South Texas and that's Jim Hogg, Zapata, Webb and part of Starr. And it's very source specific, it's being exported at an unknown rate, it's a slow grower, it's slow reproduction and it fits all—all—all the criteria of endangered plant species and has for many years, and—but the Federal Government does not want to touch it because of the Indian situation with it, because it's used in their reli—religious ceremonies and they come from all over the United States to get it here in Texas.
DT: These two stories about poaching for—for deer and peyote make me think a little about private property rights, which has been a pretty hot issue and I was wondering if you might comment about that
0:21:21 – 2075
AB: Well, it's always been a—here in Texas we have a unique situation because the majority of Texas is private property and we also here in Texas have, for the most part, a different water system on water rights than most of the states. We have—we have what we call a right of capture, in other words you can—you—you have the right to capture any water on your land up to a point, and any water under your land. You remember the famous catfish deal in San Antonio, where the guy drilled the big well into the Edwards Aquifer and was pumping millions of gallons out to raise catfish, and he was doing it legally, basically, under the existing laws that were set up many years ago. And, of course, that's a contentious item for the future. And then here, naturally, Texas being basically a private property state with very little public land and most of these larger places being cut into smaller places with each generation and we have the problem when you're dealing with—

with big game animals that roam over a fairly large area as a home range we had a problem—our biggest problem for the future in White Tail Deer management is how to manage—how are we going to manage White Tail Deer populations that roam over land ownerships that are increasingly being fragmented into smaller and smaller land ownerships with different ideas of—of what to do and how to harvest or how not to harvest or whatever with them.
DT: Maybe we could back up a little and talk about managing land in general, you know, whether it's a small tract or a large tract and some of the things that—that you try to keep in mind, for instance, caring capacity and how you make sure that you—the populations you're trying to support fit with the amount of land you have and quality of the habitat.
0:23:30 – 2075
AB: Well, when I started out in wildlife in South Texas with Parks and Wildlife and—and through the years the first thing I found out is there was a growing interest in wildlife, there was a beginning to increase in value and—and I said 25 years ago, in fact I've said it on the record at some meetings, that these ran—these landowners would see the day when their wildlife resources was worth more than their livestock resources, and they had better be paying attention to it. But in those days livestock was number one and wildlife came down the line, it could be second or it may be even further back than that as far as order of importance or resources directed toward preserving it or managing it or maintaining it. And so, I kind of decided that there was beginning to be more and more interest by landowners mainly, for the most part, with a lot of them because it was worth more money. But there was very little information available and what was available was—was not in a—in a format that they could easily understand. There was no—basically, not much technical help available to them, so my thoughts were we need to do something about this. Most of the information that was available at the time was buried in the scientific journals, the popular publications were few and far between. And for the South Texas area where I worked, there was basically not much and so, I started working with other landowners when time permitted and my—Zachary family allowed me to in some instances, and I started writing and eventually wrote a book, and through the publication of that book it had, I would say, profound influence over the movement toward what we call quality deer management. Not only in Texas but in—particularly in the Southeast and Northeastern states. And the reason that came about was because of what I'd done here in Texas. They have
0:25:56 – 2075
an organization called Southeastern Deer Study Group, it's made up of the quote top deer people in each state belong to that and they have an annual meeting once a year, and we're talking about quite a number of states. And they rotate the meeting from state to state to state each year. Well then, I believe it was 1983, they asked me to be the keynote speaker at the annual meeting in Charleston, South Carolina. So the speech I made created quite a bit of interest in a whole new concept in deer management for the Southeastern states. And a bio—a young biologist by the name of Joe Hamilton that worked for the South Carolina Game Department, picked up on it and eventually he started the Quality Deer Management Association, which is now a very thriving organization that has a lot of chapters in a lot of states and it's growing by leaps and bounds, the movement, and it all started basically from that meeting in 1983.
DT: What was…

0:27:10 – 2075
AB: And you—you've got a book that was published by that organization and that—that was one of the results—not that book the other book—the—and—a lot of people began to—to look at it in a different perspective—deer management. Especially in the Northeast and Southeastern states and the interest is continuing to grow.
DT: And what was the new insight that you brought in '83?
0:27:42 – 2075
AB: Basically, we've been—we had been working in Texas with emphasis on an antlerless segment of the herd and my emphasis was on whole herd management within the constraints of the—of the habitat and just trying to put it all together. And then, you know, deer—deer management is highly influenced by habitat and highly influenced by livestock operations. And the book we published here mainly for Texas, and particularly South Texas, was—addressed all those issues. Whereas the book put out by the Quality Deer Management Association is a little broader and is written to cover everything from the Southeast to the Northeastern states. Where our book, the book that we published here in Texas in 1975, is basically directed toward Texas partic—in particular South Texas. But—but, the principals in the book apply anywhere that deer are found, the prin—the basic principals.
DT: And what are those?
0:29:02 – 2075
AB: Basic principals is maintain the deer herd within the caring capacity of the habitat which is a very difficult in—in many instances, not only to census them to know what you've got, but to know what the caring capacity is–is very difficult. To maintain a good buck-doe ratio, to maintain by maintaining all these other things maintain a high recruitment which is high fawn survival, maintain as close to possible to a natural buck-doe ratio and harvest accordingly when you reach these objectives, then harvest the herd accordingly.
DT: You—you mentioned maintaining a—a proper buck-doe relationship. Can—can you talk about the—the difference between those who hunt for trophy and those who hunt for—for meat and you know the different pressures to hunt for antlers and—and—and not?
0:30:08 – 2075
AB: Well if we—you know there's been a tremendous change from say 40, 50 years ago to now from a—from a standpoint of what we call subsistence hunting or hunting for meat. You would be far better off to go buy your meat at the—at the—at local grocery store compared to what it would cost today to harvest venison. So, basically, I look at hunting as an outdoor experience, not necessarily the taking of the game animal, but all of the experience and the experiences you—you feel and—and get in—in a hunting experience itself. And, if there's an opportunity to harvest a quality animal, fine, that makes it even better. But the whole idea of quality deer management is—is let's maintain a healthy herd. And what you would term as a trophy animal is basically a byproduct of maintaining a good healthy herd. Now, an unhealthy herd normally has no quality animals in it. A herd with a poor buck-doe ratio, poor age structure, poor recruitment or too much recruitment, either way you want to look at it, you very seldom find quality animals in that type of herd. But when you have a good herd and have good buck-doe ratios, good age structure, good recruitment and the—and the numbers are in tune with the habitat then you have quality

animals out there, not necessarily are you going to get them, and that shouldn't be your primary objective, although it is for a lot of people. But to me the outdoor experience, the actual experience of going out—camping out or being with your friends in hunting camp, the camaraderie, and you going out and learning or knowing what plants to look for that deer prefer, or knowing how to track, or knowing how to read signs and decide where is the best place for you to hunt, and all of those things go into the hunting experience to me. To me it's also a quality experience and then—and then the chance to harvest a quality animal just adds to the mix.
DT: Can—can you maybe tell us about some of the—the good hunting experiences you've had? Some of the good hunting trips that you've enjoyed?
0:32:37 – 2075
AB: Well the best way may I say that in a nutshell is I have a quality experience every time I go out and occasionally I fire a shot.
DT: Did you do this kind of thing with your father? Is this like a generational thing that's been passed down in your family?
0:32:54 – 2075
AB: Well, you know, the hunting scene has changed. You have people now that they—they don't know anything about deer food habits or deer as livestock, but they're out there hunting deer, and they're hunting deer strictly for the trophy for the head. And to me they—they're cheating themselves of the very finest part of the hunting experience.
DT: So, I—I guess—what would you think of the ethics of the canned hunts that you sometimes read about or the hunting at a—at a feeder that sort of …
0:33:32 – 2075
AB: Baiting is a controversial subject. It's legal here in Texas and it's big business. Millions of dollars are spent on—on feed and millions of dollars are spent on feeders to put it out with, and for people they wouldn't be able to be very successful hunting without that. Other states it's illegal to bait or they have certain restrictions on baiting. There—there's a variety of different ways they control in some states baiting. Some allow baiting up until so many days before the seasons and you can't bait—but this brings up the question is it's legal to plan any crop you want to in those states. And a lot of those states—a lot of those crops are known deer attractants. Now, ethically, what's the difference between pouring it out of a sack and growing it out of the ground if it attracts deer for the purposes of harvesting?
DT: You mentioned something else about maintaining a quality herd and that's fawn recruitment. And I was wondering if you could talk about the role of predator control and coyote control in trying to make sure that you've got enough fawns?
0:34:50 – 2075
AB: Predator control has a role where you have good habitat with low numbers and you need to increase the numbers. I think on a—on a temporary basis to—you control predators to get those animals above a certain threshold where they'll fill in the habitat where—where—where they may be in low numbers but they should be higher. It has a role. But otherwise, in most cases, the predator control is—is not a necessary part of wildlife management in most cases, in fact
(misc.)
0:35:31 – 2075
AB: Predator control is a—is a tool in certain instances, but for the most part—predators for the most part are part of the ecosystem and part of keeping everything in balance. From

a livestock standpoint the—there could be problems with certain animals or—or certain areas. And my—I've always been of the opinion where you have a problem with a particular predator if it's possible take this particular animal or group animals out or in that particular area and if you can't do that or it wouldn't be feasible, let's set up a fund to—to reimburse the—the man on bonfire provable losses; let's reimburse the—the landowner, the rancher or the stockman for his losses. It's far better than having widespread predator control where it's really not needed.
DT: Do you—do you remember any of the damage control officers? Any of the trappers and hunters?
0:36:29 – 2075
AB: Oh yes—yes.
DT: Can you tell any stories about some of them?
0:36:34 – 2075
AB: Well it's not—I'd really rather not comment on it but I was a
DT: I imagine a lot of them were pretty skilled in tracking and—and—and bringing down
0:36:44 -75
AB: Oh yeah, I followed one around to learn how to set traps. And he'd been doing it all his life, and mainly on coyotes and bobcats, some mountain lions, and he was very skilled at it. In fact, I followed him around for three months, and in that three month's time, on a basically limited area, something like 10 square miles, he trapped a hund—if I remember right—127 coyotes and 64 bobcats in 90 days, so he was pretty efficient. But that was back in the 60's. And he—he was an old man then, he had been doing it all his life, basically.
DT: Some of the other risks I've heard for—for fawns are—are fire ants and I was wondering if you know what sort of
0:37:33 – 2075
AB: Well you're talking about an exotic introduced species. Fire ants have had a significant impact period. On any way you want to look at it. And are continuing to have a significant impact and are continuing to spread. We also have exotic mammals and exotic insects, exotic plants that have been brought in. Are you familiar with the a—with the a—I believe it's a snail that's infested the Great Lakes region and clogging up all the water intake deals and, you know, we have all kind of problems with exotic species being introduced, plant, animal, insect.
DT: What is your approach to trying to deal with something like the fire ants
0:37:24 – 2075
AB: There's no alternative to it right now. We just have to try to manage the best we can with it because there's no way to eliminate it. There's really no good way yet to even—even to suppress the effects of it on a large scale basis on fire ants. There—there's no known method yet to suppress fire ant populations on a large scale basis for any period of time—any lengthy period of time it's temporary.
DT: One of the other exotics that we see a lot of is Coast Bermuda and some of the other improved grasses. What sort of advice do you give to the rancher who wants to have the Bermuda for his cattle but it's maybe not the best forage for his deer?

0:39:17 – 2075
AB: What you're talking about is a monoculture. Anytime we go to a monoculture on a wide spread basis, you have someone down the line who usually gets in trouble. Buffle Grass was

introduced into South Texas. It's a wonder grass from the standpoint of the cattleman, but from the standpoint of wildlife other than possibly since it's a bunch grass, giving some—maybe nesting areas for quail, it's of very—no value to wildlife basically. And the same way with blue grass, it has little value, and a lot of acreage has been put into it. And my recommendation to most people way back was let's go slow with this and let's put it in certain areas and let's put it in—and like Buffle Grass, we used to advise them to put it—strips in and leave brush in between the areas that they put it in. And there were some mistakes made by people along the line. We used to say you could maybe put up to 40 percent of your total acreage in improved grasses and still maintain but, over the years I've—I've come to the conclusion that 30 percent would be a lot, because as time has changed, and I predicted that the wildlife resources would eventually be worth more than livestock resources in many instances,
0:40:40 – 2075
and recreation period. Recreation period is beginning to be that way. Of—of all types of recreational actives, whether it's hunting, fishing, bird photography, birdwatching, whatever. And if you've gone to a and—and destroyed most of your native habitat, you don't have that flexibility to take advantage of those things. So, I sure wouldn't recommend it on a very large scale basis at all. It has a place if you want to try to balance wildlife and livestock operations, but let's make sure it's done in a pattern and in a very well planned organized pattern.
DT: You mentioned earlier that Buffle Grass has little value for quail and I wondered what sort of advice you'd give landowners when they want to both provide a quail hunting experience and they also want to provide for deer hunters and they're trying to balance the goals of each? How do you manage the multiple species?
0:41:50 – 2075
AB: Variety. Variety is the name of the game any way you want to look at it in wildlife management. The greater the variety of soil types, the greater variety of plant species. The greater variety of plant species, the greater variety of bird and animal life you're going to have, including the variety of the topography of the terrain—terrain. You need some slopes, you need some drainages, you need draws, all of those things—the soil types are going to change and the plant species change with soil types. So, the greater variety you have in topography, the greater variety you have in soils, and the greater variety you have in plant species, the greater variety of wildlife species, be it bird, animal, whatever you have, the greater flexibility you have in management for it. So I say keep variety and keep diversity as much as possible. And then managing within that is, you know, we could take three days discussing that. The variety, diversity is what you manage for. In other words, you look at the whole—the—the new catchword in wildlife circles is you look at it from a—a ecological—the whole ecosystem standpoint, not just single species or a few species, you look at it from the whole spectrum of all of it.
DT: How do you balance it if some of the species you've got are game species that you can recognize that would a return on immediately?
0:43:27 – 2075
AB: Well most people want to manage for the ones that are economically valuable. Let's look at the history of the Western states for a minute. The Western states are notorious where most of it's public land for the livestock interests, the mineral interests, the timber interests always took precedence in any decision effecting wildlife they—they—they got—

they got preference. Wildlife was at the very end of the chain of—in decision making on public lands for many years. It still is in most instances. And the reason being it didn't have the economic value that the other three had, the timber interests, the mineral interests and the livestock interests. That's where the money came from for the counties to operate, the cities to operate, the—the forest service to operate, the Bureau of Land Management to operate. Wildlife really didn't generate any income for those entities, or very little compared to those other three so, naturally, it was at the tail end of any decision making process. It still is to a large degree.
DT: It seems like you've seen the future in wildlife maybe having more value than cattle and goats and these other kinds of livestock.
0:44:50 – 2075
AB: Oh it's—it's surpassed it in most areas here in Texas. Net profit wise you can—many people are—are buying ranches—absentee landowners now are not even maintaining a livestock operation, but you can have both.
DT: While we're on the subject of land management in the Western states where much of the land is public, I was wondering if you might comment on the tension between the private landowners and some of the public bureaucrats where the bureaucrats want to provide a hunting experience for non landowners and the private landowners are I guess worried about competition for limited more operative hunters? How do you see the future of hunting playing out in Texas where you've got this sort of competition between public and private hunting lands?
0:45:58 – 2075
AB: In other words what you're trying to ask me is do you think that Texas will lean more toward privatizing wildlife? Is that what you're trying to ask me?
DT: Yeah, that's fair enough.
0:46:10 – 2075
AB: In some respects it's been privatized although the—there's some organizations, some individuals, private landowners who would like to have more power over what's on their land. We talk about hunting leases in Texas, or they sell an animal for so much. Actually, all—all the–the wild game in the State of Texas belongs to the people of the State of Texas and what the private landowners are basically charging for is the right to come on that land to hunt for it. Legally that's—and what you're saying is that do you think there'll come a day when, say the White Tail Deer if you have them enclosed with a high fence would belong to the landowner? I don't see that in Texas. It's already—that's already true in some of the other states, but that's not true in Texas and I don't see it'll ever come to the point where all the White Tail Deer on your land will belong to you. It may come to the point some landownerships way in the future, where if you removed all of the native deer on your land, if you fenced it and removed it all and then bought deer from other areas and put them in, there's a possibility, but I'd say that's a long possibility. That's pretty far in the future.
DT: What about the deer and other wildlife that are on public land? How do you—how do you manage it so that there—the folks who are hunters have equal access to those parks?
0:47:54 – 2075
AB: Most of the public land—most of the public land in Texas, if it's owned by the Parks and Wildlife Department or managed by the Parks and Wildlife Department, like land around some of the lakes that have been built have been turned over to Parks and Wildlife to

manage, it's—it's limited entry—it has some form over control over a number of people on the large big game animals. It's just not open to anybody that wants to drive up and go in. There's certain restrictions and rules and regulations they have to abide by just like you find on private landownerships. Otherwise you would destroy the resource, because there's much more demand than there is supply.
DT: What about the issue on public land of the right to hunt if you have a license versus the people who want to go on public land and the only thing they want to shoot with is a camera? Which set of rules…
0:48:48 – 2075
AB: Let me talk about—let's go back to Western states, where most of the public land is found today, or—or some of the Eastern states that have large national forests or state forests. Basically, we're talking about Bureau of Land Management land, state lands and forest lands, public lands. The solution to it was—to my way of thinking, was brought up 15 years ago by a man much smarter than me named Jack Ward Thomas, an old Texas biologist that got to be head of the U.S. Forest Service. He's now retired and has a—a special position at the University of Montana. And Jack Ward Thomas proposed basically what I'm going to tell you many years ago and it made more sense than anything I've ever heard, and I fully agree with Jack Ward Thomas. He said, "Because wildlife is always on public lands it got the short end of any decision making process because it basically did not have value that other entities had, such as the timber interests, mineral interests and livestock, let's give it a value. And let's give everybody a piece of that value so they will have a vested interest." He said, "Everyone that goes onto public land, whether it be for picture taking, camping out, gathering fire wood, swimming in a stream, fly fishing, no matter what reason you go on public land, you should pay a fee." That fee goes into a central fund which is redistributed in this—in this fashion: one-fourth
0:50:32 – 2075
of it goes to the state in which the land is located, the county in particular—one-fourth goes to the county in which that land is located on a prorated basis, one-fourth goes to the state, one-fourth goes to the state, one-fourth goes to the organization that has to manage or look after the land. If it's Forest Service land one-fourth goes to Forest Service, if it's BLM land one-fourth goes to BLM, if it's state land one-fourth goes to the state. One-fourth goes in a fund for acquisition, enhancement, management and so forth. So every entity involved gets a piece of the pie. They all have a monetary interest and a vested interest in perpetuating that land and keeping it in good shape, and—and acquiring what needs to be acquired to make it a better unit. And—man—and—you—everybody has a piece of pie that way. The county, the state, the entity that has to manage it plus there's a fund set up specifically for it. And it make more sense than anything I've ever heard. And by rights everyone that uses that land, whether hunter, fisherman, birdwatcher, photographer, or otherwise should be paying their share…
DW: The other question that came up in the past is a corollary issue…the decision between what happens in the Endangered Species Act like I'm a private landowner and it's on my land and it's not my animal, but it's on my land when you try to make it endangered. Do you remember when people would discuss that subject of having the Endangered Species Act getting in the way of private landowners like you can't tell me what's off limits to use…if you could kind of phrase that better.
(misc.)

DT: It's a private property rights issue I guess we discussed before.
0:52:32 – 2075
AB: Well, you're—you're talking about a very complex issue when you talk about the Endangered Threatened Species Act and restrictions they can put on private land concerning those. And, I believe there should be a meeting of all parties involved and if—if you take away a certain practice, or—or you basically deny a person the usage of that land to his fullest then he should be compensated for it by the people that are taking it away. Whether it be the Federal Government, the State Government, or whatever, he should be com—in other words, if you devalued his land or devalued the usage of it or his full enjoyment and usage of it, then you need to compensate him for that and determining what that is worth is going to be the problem.
DT: If you were an agency official and you had unlimited funds and power would you work through the stick or the carrot? It sounds like you would go toward the carrot that you would try to give incentives to the landowner to set aside…
0:53:40 – 75
AB: The best—the best way to approach it is try to get the landowner to do all that he possibly can on his own. If that isn't sufficient to—to obtain the objectives wanted in the program, whatever that may be, then if you have to deny him certain things, then compensate him for it.
DT: How about when you were a consultant or you when worked as a manager for the Zachary Company? How would you persuade the landowner to spend money on a particular kind of wildlife management?
0:54:15 – 2075
AB: Well, I found out at an early stage that anyone that ever called me and said they needed help with anything with regards to wildlife, the majority of the time their backs were to the wall. In other words, things were so bad that they just couldn't stand them anymore. Not always, but in the early days it was particularly true. And sometimes you find it today. In other words, they've tried a little bit of everything but it hadn't worked for them, and all of a sudden they decide they need somebody that maybe is a little better than they are at trying to handle it
DT: Can you tell us some of those instances?
0:54:53 – 2075
AB: You find each piece of property has it's own set of—it's—it's own potential and it's own problems and so forth. And you have to look at each individual property as an individual entity. You can go one place and they've got certain—certain things that can be done, potentials that haven't been fully developed, and then they have—had certain practices that have been detrimental and so forth, and you've got to look at the whole situation. And when I go—when someone calls me, the first thing I tell them is, "I want to come right around and look at your property on the ground, with you, whoever's in charge, the owner or the manager, and discuss it with you and look at it." And when I do that, then I get to see the soil type, the vegetation type, I get to see the water distribution, I get to see the cattle operation, or livestock operation, whatever they've got, and I—I get to hear what they would like to do with it. And in many cases, they've got unrealistic expectations compared to what can be achieve, that's number one. Most of them their—their—their—their expectations of what can be done with it far exceeds what it's capable of doing. And then you—when you look at all those things and put them all together, you work out a long

range management plan. I always ask them, "What are your short term objectives for this place , what are your long term objectives?" And many times some of them are not realistic and you have to discuss that with them.
DT: And a sort of typical instance would be a fellow's had a die off or he's got a parasite problem?
0:56:41 – 2075
AB: I would say the majority of the time the problem is too many animals on the habitat. Both livestock and deer when it comes to deer management. And poor range condition.
DT: Speaking of range conditions, and maybe aside from particular clients you've had, what sort of trend have you seen in landscape in Texas ecosystems in general?
0:57:14 – 2075
AB: Well, when I first went to South Texas, the trend was—and—and—and by the way, the soil conservation was pushing to let's eradicate all this noxious brush. And that had changed now to where they have gone through a series of stages from eradication to management to—they've even got a new program now, but the whole—the whole emphasis has changed from brush eradication to brush control to now to brush management or habitat, and you know, they—they look at in a whole different perspective than they used to. Everybody in South Texas when I first went there were trying to clear land and put more grass and raise more cattle. And it's completely turned around now. A lot of them that have all that monoculture of grasses wish they had some of the native brush back on it. In fact, I even get requests for how can we plant native brush species? Is it feasible to put them back on the land?
DT: Is it? Can you restore the brush?
0:58:17 – 2075
AB: You can never—once you clear land in South Texas, which is a semi-arid environment—for the most part, most of those counties down there are less than 20 inches a year rainfall. It takes literally, I don't know how many years, but many many many years for it to come back to a natural mix. We have what we call succession in plant species and it takes many years to go through this succession to get back the variety of plants you once had, once it's been mechanically or chemically altered. Now, there's mechanical methods now that don't alter, such as—you can go with the aerator, the roller chopper, and that doesn't change the mix, it just brings it back down to ground level and starts it over again. The root plow, the disc, some of those things change the—the mix, and degraded it from the standpoint of wildlife on a long term basis.
DT: Well is your attitude one of preserving things as they are or more conserving them and managing habitats?
0:59:38 – 2075
AB: Depends on the objective of the landowner, but I always encourage them to maintain as much of that native habitat as they can.
DT: And what do you think is driving them towards that? Is it economics that cattle don't pay, wildlife does? Is it aesthetics?
0:59:57 – 2075
AB: One of two things—one of two things would cover most of the people I deal with; the economic value or the intrinsic value. If economics is not of importance to them, the intrinsic value is. The things that you can't—you know, all the things that you and I would enjoy, the—the sound of a coyote howling, or see a—a—a—the hawk catch his prey and all

the intrinsic values of wildlife, having wildlife, that you can't—you know, you could take days discussing all those values. But, in other words, you can't really put an economic value on it but the value is there. In other words, it may not bring in a hard dollar amount but the value is there to you.
End of Reel #2075
(misc.)
0:01:15 – 2076
DT: Mr. Brothers, I was asking you earlier off tape about conservation and preservation and the difference between the two and what you said about…
0:01:24
AB: Well there is—there is a lot of difference between the two. Preservation is when you don't do anything and let nature take its course. And nature can be pretty cruel. And, of course, I'm experienced in White Tail Deer and that's basically my—my area of expertise so let me give you a prime example. The preservationists are going to go in there and say, "We're not—we're not going to let man take any deer." And here's what would happen; the population would build up and actually eat themselves out of house and home, destroy the habitat or degrade it to the point where there would be a die off. And they would die off to a small number of animals and then they would—as the habitat started recuperating they would come back along with it and you'd have this ups and downs, extreme ups and downs in population and habitat quality. Where if you go in there, and you can't say that we have a natural setting anymore where the predators and all these other things that effect the deer would it be accidents, disease, predators or parasites would effect them. We've changed all that and we—we can't unchange it, so you have to go in there and manage it. And to me management is part of a con—conservation effort, and when we start talking about that we also talk about what we call additive mortality and compensatory mortality. And no one's talked to you about this I want to try to explain it to you. And—and—and this is a—just a given in—in management circles. Let's take, for instance, gallinaceous birds, which would be quail or turkey as a good example. Each year they have very high reproduction you know. One—one pair of quail will say have 18 young ones, a turkey have a lot of young ones. And the reason they have a lot of young ones is because there's a high turnover rate in the population. Alright? In compensatory mortality we know in quail populations that a very high percentage of quail are not going to live until next year, they're—they're going to be gone before next summer or next breeding season. Whatever that percentage is, it could be 60 percent, 70 percent, different people say different things, but anyway there's a big turnover rate in quail whether you hunt them or not. So, they try to set the seasons where you go in and you take these birds before a lot of this other loss occurs, and that's called compensatory mortality. But let's say that the seasons or the bag limits are set wrong and you start getting into what we call the brood stock. In other words, what would be left next year? That's called additive mortality.
0:04:15 – 2076
And additive mortality you don't want. Now, and a good example of that on a large scale is for many years on our—on our water fowl regulations the—the bag limits on the fly aways were set with the idea that most of what would be taken—the—the number you could take and when you could take them into different states would be compensatory mortality and they found out a few years ago that they made a little mistake on the calculations, they were getting additive mortality. So, you—you can well remember—plus we had other

factors, we had—we had some of the nesting grounds degraded and we had poor nesting success for various reasons on certain species of ducks, but you could well recall the—the very tight regulations on water fowl hunting for a few years but they for the most part, by cutting back we've corrected that problem and you're seeing increased bag limits. And that's a prime example of what we call compensatory mortality and additive mortality. And the same thing applies in big game species. They're a renewable resource, they have young each year and you're going to lose a certain amount and instead of losing them to–before you degrade the ha—you—you take them about before they degrade the habitat. In other words, a White Tail Deer eats approximately five or six pounds of forage a day. Alright? If we don't hunt them at all, and really, according—we're already at saturation on caring capacity and this year's farm crop or recruitment is going to put us above that, and they're going to eat five pounds a day per animal per day. Let's just say five. If we don't hunt them, they're going to eat that until there's nothing left to eat and then you start losing it. First you're going to lose young and old and then you start losing the others because they're going to eat something until they die. And when they do that they degrade the habitat. Why not go in and take this surplus animal since it's a renewable resource without hurting the herd, in fact, keep it
0:06:21 – 2076
in good health, take these animals out of the population, or birds, whatever it may be, provide this revenue to the landowner, revenue to the state, revenue to the agency that helps manage them without hurting the resource. Why don't we do that? And that's what—that's what mainly the system is set up for. Without hurting the habitat and, yet, provide recreation, provide a—and—and really hunting is a big business. And you've got to remember that hunters per se, have funded since the passing of the Pittman Robinson Act and the Dingle(?0:07:00) Johnson Bill on fishes, they're the ones that have funded most of the programs you have in all the states now. And here in Texas, the most monumental flop of all was a non-game stamp. Do you recall that? They came out with a non-game stamp and all of these guys that didn't hunt, but they went out and birdwatched and they took pictures, they were photographers, they were supposed to buy that and fund—that would help fund the programs to—to keep, you know, for Parks and Wildlife to—to have these programs and—and to fund what needed to be done on these programs. It was a monumental flop, people wouldn't buy it. But for those who don't understand the Pittman Robinson Act, basically, what it is and passed many years ago as an excise tax on sporting arms, sporting ammunition and—and other things that go toward hunting effort, and that money is collected, put into a central fund by the Federal Government and then redistributed to the states for approved programs through the Fish and Wildlife Service. And it's been a very successful program. And if carried—if you managed for all these species that were of economic value by the people that were willing to pay for it, they have carried all of these other fringe species along for years. It's just the last few years we're beginning to see problems in the states and so forth for non-game animals and non-game birds and all. Which—which they deserve it, but we found out the people that really cry for it are—are—are pretty—ha—have not been stepping forward to fund it. We've always funded it for them. And that's changing because they now have excess
0:08:47 – 2076
tax on binoculars, photography equipment and—and so forth, and—and the fisherman, the same way, it's all on fishing equipment. And, so it's beginning to—it's beginning to get more

into balance the way it should be. If a person is interested in something, he should be willing to help fund—fund the preservation of it. Or the management of it.
DT: You're talking about this balance that you said I was wondering how you can keep the balance on a piece of habitat if things come up that are basically unpredictable, unforeseen, difficult to control, or you have a drought, or you have some sort of a parasite that moves through, wildfire perhaps. How do you respond to those things?
0:09:40 – 2076
AB: Well, here's the way you respond, sometimes you can't do a thing about them and you suffer the consequences. But the good thing about it is that over time those things will turn around and—and you might be able to help it turn around through certain management techniques or management practices. But the good thing about it is most of the species you deal with are—are renewable, you know, they have young every year and they have the potential of bouncing back. All you need is—sometimes they need some help in that, but that's where the management part comes in, to aid them. You can't control the amount of rainfall or the timing of it, in some cases you—you have no real control over predators, in some cases disease, but you do have control over some things that may effect recovery from those experiences and that's where management comes in. What are the things you can do and how do you do it?
DT: David mentioned wildfire as being one of the risks that are the most difficult to control. But I understand that fire is often used as a prescribed burn as a management tool. Do you have any opinions about it?
0:10:52 – 2076
AB: A prescribed burn is a very—is a very important management tool, but it—for everything that has a positive, there's usually some negatives somewhere down the line. What about air pollution with all this burning?
DT: What would be some of the benefits that would…
0:11:10 – 2076
AB: Prescribed burning has a lot of benefits depending upon what you're talking about. But it has a place, prescribed burning, and there's so many different ways it could be used and so many different benefits that it would take me a long time to enumerate them, but there's a good book on it, in fact, by Texas A&M University, on prescribed burning, they have a very good book out on it, Texas A&M. For those that are interested.
DT: I understood that prescribed burn is sometimes used to control woody species that are invading what was traditionally grassland savannah. What do you suggest as a good way to do that?
0:11:53 – 2076
AB: Depends on what the objectives are. We're right here within 50 miles, or probably—I don't think there's another one left in the wild, the—the Prairie Chickens we had down here. You know, they're basically gone in the wild, the Atwater Prairie Chicken. And—and the reason they're probably gone is changing land use practices. They weren't hunted out, they've been protected for years and years, so they had to be changing land use practices. Most prescribed fire in the old days was uncontrolled fire, not prescribed fire. Part of that ecosystem or ecological balance that kept those—that species flourishing. It probably was, nobody knows for sure, but when—when there've been millions of dollars on researching the Atwater Prairie Chicken and, yet, we failed to save it. The only birds left basically the birds in captivity. Now, whether we can restart that species—and when you have a species

that has a very critical habitat requirements, or critical food habits or something—you know the history of the world is—is extinction of species. You're always going to have some of it, but for those that we can manage for and save, let's save them. Unless it becomes basically impossible. Now, a—a good success story right here close to us too is the whooping crane, but sadly the one that hadn't been a success story is the Atwater Prairie Chicken.
DT: Were you involved at all in the restoration of some of the wild turkeys? I understood a lot of the ones that…
0:13:51 – 2076
AB: Same thing happened to the wild turkeys in Texas that happened to White Tail Deer about—is a—is a very good sound program by Parks and Wildlife to restock areas that were suitable habitat and it's been very successful in the last 15-20 years. We've got turkeys in areas of Texas where turkeys hadn't been found in many, many years. We even got the Eastern turkey back in the Eastern part of the state through restocking efforts. Been a very successful program. When I was growing up in Gonzalez County and Marietta County, I never saw a turkey, they didn't exist. Now there are turkey everywhere in suitable turkey habitat, but many, many years ago they were either hunted out or hunted down to a—to a population level where they couldn't—they couldn't get above all the pressures against them, the predation, disease or everything. But the way the Parks and Wildlife normally handles that on restocking deer and turkeys—they close the areas—they put together—first they had to put together a sufficient sized area to cooperate on restocking effort. Then they close the season for x-number of years, usually five. And then at the end of five years they census and if—if pop—you know, if it's recuperated to a certain degree, they'll allow limited hunting, if not, they keep it closed for a little bit. Turkey restocking and—and—and big game restocking has been a real success story in the State of Texas for the Parks and Wildlife Department.
DT: Do you have a favorite place within the State of Texas they enjoy visiting that means something to them?
0:15:40 – 2076
AB: Do I have a favorite place?
DT: Yeah.
0:15:44 – 2076
AB: Anywhere I can get away from the crowds of people and be out by myself, out in—out in good habitat. It don't matter whether big game area, just so there's some type of wildlife to observe. That could be a lot of different areas in the state.
DT: I guess that experience of being alone and close to wildlife is getting rarer and I was wondering if you could discuss some of the trends you've seen in land ownership as some of these big tracts have been fragmented or land use being changed, you know, brush going towards farming?
0:16:27 – 2076
AB: Well, of course, the biggest change I've seen is the fragmentation. Land ownerships becoming smaller and smaller land ownerships. The other big change I've seen is—is old traditional land that's been in family from generation to generation is being lost and—and you see more and more absentee landowners—people that had a—a different profession that made a money in a different profession other than ranching or farming, buying the land and they're more interested in the—in the ecological aspects of it—the wildlife values

or the recreation values and livestock has no real importance in the equation. And that's a—that's a big trend here in Texas, a big trend. People are buying land not for the—for the economic value of the farming and ranching activities, but for the recreational, the aesthetic—the aesthetic aspect of it and—and some of them are returning it to a very good condition too. Doing an excellent job.
DT: Have you been involved in any of these recovery efforts? Restoration efforts?
0:17:31 – 2076
AB: Oh yes—yes—yes. Not—not from the standpoint of non-hunting activities, like horseback riding, birdwatching, I'm not involved in that. But there is a big movement toward some of those things.
DT: Can you tell us what your experience in trying to restore places to a good hunting habitat?
0:17:54 – 2076
AB: Well the first thing people have to realize is what took years to degrade also takes years to bring back. Most of them want to do it in a year or two and it doesn't work that way. It takes years, depending on—on the situation and where the land's situated and how bad it is. Some can be brought back in a shorter period of time, naturally, than others, depends on how—how far down they are. But, most of my experience with most land, it'll take from five to ten years to bring it back to reasonable good—good condition and some of the land I've seen in Edwards Plateau, where you had sheep and goats plus too many deer for many, many years, and you had this browse line and—and basically rocks on the ground, it might take 20 years or longer. I mean applying every technique known to bring it back.
DT: And what are some of the typical techniques you've used?
0:18:53 – 2076
AB: Well, get the livestock operation down right, get the cattle numbers right if it's cattle, rotational grazing system, proper stocking rates to allow the land to recover. In some cases, I'll even recommend taking the livestock off for the first year or two and then reintroduce them in much reduced numbers. Water distribution is a big thing, a lot of the country further South or West of here you have a water problem with it, you don't have good water distribution. Habitat enhancement practices, whatever that may be, that includes a lot of things. In some—in some cases, if you've got some old field areas at all, cleaning them up and planting certain crops in them.
DT: Good crops for oats for wildlife?
0:19:52 – 2076
AB: It could be anything. It could be seed crops for birds, it could be a—a winter crop for wildlife, it could be a summer—spring—summer crop or it could be both, depending on the situation.
DT: You mentioned rotational grazing. Do you have any opinions about the intensive grazing that Alan Savory recommended at one time?
0:20:15 – 2076
AB: That's—that's extreme—I'm on—I'm on the moderate part of that. Most people cannot handle it the way it should be handled, intensive grazing, I've never recommended it, I'm—I'm more on the moderate side, in between, you can't have grazing all the time, you have to have some type of rotational grazing. Are you familiar with the barrel system? The barrel system is four pasture. The barrel system has been popular in some areas and particularly the Edwards Plateau and further Northwest. I prefer multiple pasture, one herd if possible.

Or if you happen to have more than one herd, have multiple pastures for each herd. That could be—the minimum for my part is probably four pastures. But, here is my—here is my basic premise, rule of thumb on that is that I would like to have in your rotational grazing system, the most—most amount or most acreage of land possible, vacant of livestock at any given time in—in your grazing system, whatever that may be. Without going to having to move them every X number of days, you know, we're talking about having to move in X number of weeks or maybe X number of months.
DT: With this new wildlife agriculture exemption, are you suggesting to any of your clients that they just not run livestock at all?
0:21:50 – 2076
AB: At some point in time, they will have to. It's—you're going back to your preservationist ideals and it doesn't work well that way. You need some to—to stimulate plants to stir the soil, you need some grazing activity on it. In other words, you can get too much grass. Not enough opening and it can be too thick. At some point in time you have to have some grazing on—on the land to—to really keep it good. And—and the plants—diversity of plant species. So your—your grass, if you let it grown long enough, it'll choke out all your forb growth. It'll decrease forb growth and forbs an important part of the ecosystem too. A plant community.
DT: I've heard that in some parts, especially in the public land in the West, that they're recommending bringing back the buffalo.
0:22:49 – 2076
AB: Well, buffalo is a grazing animal also, just like livestock.
DT: Yep…the word I've heard is that some of these buffalo are seen as being more benign then cattle and I'm curious if you have an opinion.
0:23:04 – 2076
AB: Well, they—they're going to eat a certain amount of forage per day just like a cow. They are a lot harder to rotate in pastures or move around. In fact, in some instances they move around where they want to move around to. They have a real problem in some with them just going over fences and going where they want to. So, I can't see that buffalo have a real advantage. If anything, I'd say buffalo would be a disadvantage because you don't have the necessary control over them if you needed that control like you would domestic livestock.
DT: We should probably start trying to wrap this up so you can get back to your life. I wanted to ask you though, what you think some of the bigger conservation challenges are for managing wildlife and habitat? Or perhaps in other areas that are environmentally related.
0:24:08 – 2076
AB: Well, it's just like anything else, the biggest challenge is the—all the pressures from industry from increased population, from urbanization, all of those things are going to effect it and how we're going to mitigate those and how we're going to manage for them is our biggest challenges, including—including the break up of land into smaller and smaller ownerships. And when it comes to public land, all the diverse interests that are competing for how that should be managed. It's going to be the biggest challenges for the Forest Service, for the Bureau of Land Management and for the private landowner.
DT: If some of these tracts get fragmented, I know that some small tracts are being managed as a group and co-ops. What do you think about that?
0:25:02 – 2076

AB: I'm—I'm a very large proponent of co-op—cooperative agreements. I've been on a board of directors of our local co-op in Goliad County and I'm still active in it, I'm a lifetime member of it, I've promoted co-ops, I've given a lot of talks in the other counties about co-ops and how to start them and, what benefits can be derived for them and what some of the obstacles that are having an effect on them are and I'm—I think it's—at this point in time, in my thinking for the small land ownerships, they'd better start thinking in terms of cooperative agreements if they want anything for the future.
DT: Do you have other kinds of advice for how you can confront some of these conservation problems?
0:25:52 – 2076
AB: Ask me that again, I didn't understand all of that.
DT: Do you have other advice, like perhaps setting up co-ops that would be useful for people who were confronting wildlife problems?
0:26:03 – 2076
AB: Yeah, my biggest advice to anyone first, if you own land in an area where the land ownership pattern tends towards small land ownerships, and you're interested in wildlife that ranges over more than one land ownership, you'd better start—either join an existing cooperative or be thinking of how you can form a cooperative, and not only paying just lip service to it, be actively involved in trying to get as much contiguous land into it as possible and developing a good program. The technical assistance, the expertise, the advice, expert advice, the expertise to manage it once it's in a program is out there from the Parks and Wildlife, from Texas A&M extension service, there's a lots of help available. But it's got to be locally—local leadership, local work. You've got to do it for yourself, nobody's going to doing it for you. And you'd better be looking long term at the—at the prospects or the advantages of it. It's not—it's something that you better be thinking in terms of what your children and grandchildren have because of what you have today won't be there without those type of cooperative agreements for your children and grandchildren. You better be looking at the long term implications of –of being—having a co-op—cooperative agreement.
DT: And what is the word that you might give your children and grandchildren about your interest in wildlife and how they might share it?
0:27:44 – 2076
AB: Hopefully, they'll keep the land I've put together in the family and they'll add to it. It's already set up for them, all they have to do is take care of it and add to it if possible. Instead of breaking it smaller let's hope they can make it bigger.
DT: Well thank you very much, I really appreciate your time.
End of Reel #2076
End of Interview with Al Brothers