1

00:00:00,060 --> 00:00:08,100

This appears to have a committee. I've advised about 8 or 9 people specifically

2

00:00:08,100 --> 00:00:17,190

and it's an honor to have you all here and I appreciate you showing up to take the time to out of your busy day to come and listen to our management plan.

3

00:00:17,190 --> 00:00:23,940

So with that said, I do want to make a few housekeeping notes, about the housekeeping here.

4

00:00:23,940 --> 00:00:26,790

First of all, we have masks.

5

00:00:26,790 --> 00:00:35,070

Are available, if anybody is comfortable wearing a mask you are certainly welcome to do that and we encourage you to do that if you so desire.

6

00:00:35,070 --> 00:00:40,770

We have hand sanitizer back there on the tables. The bathrooms,

7

00:00:40,770 --> 00:00:45,630

The restrooms are down the hall, the door that's open here behind us down the hall is first down is the ladies,

8

00:00:45,630 --> 00:00:56,840

The first door is the ladies’ and obviously the second is the men’s. They’re labeled. Help yourself, we have tea and drinks over here in the cooler.

9

00:00:56,840 --> 00:01:08,600

So by all means help yourself, Like I said this is informal. Help yourself to it. You’re more than welcome to drink and eat as much as you want.

10

00:01:08,600 --> 00:01:15,500

With that said, I would like to take this time to introduce the people I invited. I'm called them the committee.

11

00:01:15,500 --> 00:01:20,750

and so I would like to invite, if not, recognize each one of you.

12

00:01:20,750 --> 00:01:30,010

This is Mr. Ernest Dallas, Larry Jones, Billy Schafer, Randy Brian, Jim Fisher,

13

00:01:30,010 --> 00:01:38,53

 Charles Gaines, Mr. Ron Riffel, and Mr. Michael Burns. It's a privilege to have each one of you here.

14

00:01:38,530 --> 00:01:48,190

so we want you to feel everybody feel welcome. But most importantly, we want you to ask questions. The agenda in front of you says

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00:01:48,190 --> 00:01:58,510

Roughly two o'clock that’s not written in stone, the main reason we having this at lunch so we would be constrained by time if,

16

00:01:58,510 --> 00:02:07,460

if this last an hour or several (inaudible) was, you know, whatever you wanted, we we're here to answer your questions best we can.

17

00:02:07,460 --> 00:02:18,630

So I just want to make you feel at home on that. I’d also like to introduce those some of our Legislature, the General Assembly here, Senator Ron Caldwell,

18

00:02:18,630 --> 00:02:29,540

And representative Steven Hollowell and I believe representative Reginald Murdoch was going to attend, but I guess was not able to attend.

19

00:02:29,540 --> 00:02:37,140

So welcome. As far as all of our other guests welcome.

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00:02:37,140 --> 00:02:45,410

So. Also, I sent out a text to the committee members.

21

00:02:45,410 --> 00:02:49,280

I hope everybody got if you didn't apologize. Randy

22

00:02:49,280 --> 00:02:58,440

I apologize. Oh gosh. So and I put it in there our plan was if it was a nice beautiful day.

23

00:02:58,440 --> 00:03:05,510

You know, I was actually going to, you know, only if you were interested we was going to take y'all out to the wooded area.

24

00:03:05,510 --> 00:03:10,710

And let him, the forester to show or have any questions or comments or concerns out there.

25

00:03:10,710 --> 00:03:16,880

You know, we can talk about it out there, but I think some of that would be addressed in here.

26

00:03:16,880 --> 00:03:23,670

But with that said, it's rainy, and they're not do not take this, you can (inaudible)

27

00:03:23,670 --> 00:03:27,710

But when the wind starts blowing, that's kind of an issue as well.

28

00:03:27,710 --> 00:03:34,220

But at the end of the meeting, if anybody wants to go out there and we obviously will, we'll see what we can do at that time.

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00:03:34,220 --> 00:03:42,660

So we welcome that as well. We want you to leave here with some questions answered, hopefully,

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00:03:42,660 --> 00:03:56,070

We've got some questions answered. Before I get started, I would like to introduce our interim vice president, Chuck Culver, invite him to say a few things,

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00:03:56,070 --> 00:04:04,770

Chuck Culver: I'll just be brief. I'm grateful on behalf of the Division that all of y’all took your time to be here,

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00:04:04,770 --> 00:04:09,780

For those of you who are not familiar with the Division of Agriculture really is,

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00:04:09,780 --> 00:04:18,900

we've been a separate institution within the UA System since 1959, and we have two sides of our house.

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00:04:18,900 --> 00:04:24,450

We have an Agricultural Experiment Station and this is an experiment station,

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00:04:24,450 --> 00:04:30,750

We have centers and stations and Shawn’s been a long time here.

36

00:04:30,750 --> 00:04:36,820

Great Representative of Ag Experiment Station. We also have the Cooperative Extension Service.

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00:04:36,820 --> 00:04:44,070

We have offices in all 75 counties in Arkansas and we have representatives here who are going to be joining the work

38

00:04:44,070 --> 00:04:51,120

for the committee from St. Francis and Cross County will also be working with Woodruff and Monroe County as well.

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00:04:51,120 --> 00:04:54,680

So I did want to say as I said

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00:04:54,680 --> 00:05:05,610

The division started in 1959. The very first acquisition of the brand-new division was this station here in 1960.

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00:05:05,610 --> 00:05:12,390

So there was a lot of shared history because the two had grown up together.

42

00:05:12,390 --> 00:05:25,800

And so we have a plan here that we're really proud to highlight, but we very much value y'all's input on this as well.

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00:05:25,800 --> 00:05:32,820

So again, on behalf of the Division of Agriculture, thank you for joining us.

44

00:05:32,820 --> 00:05:39,600

SHAWN CLARK: Before we get started, I just want to reiterate this is about y'all's questions and concerns.

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00:05:39,600 --> 00:05:45,420

So let me go to foresters here. This is Dr Kyle Cunningham.

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00:05:45,420 --> 00:05:50,010

He’s our extension forester speaking first and this is Michael McGowan.

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00:05:50,010 --> 00:05:54,270

He's the University System's forester, he’ll be speaking second.

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00:05:54,270 --> 00:06:01,920

So as they're presenting their material, if you see something that we're speaking about and you want some more interpretation of questions,

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00:06:01,920 --> 00:06:09,480

stop to let us know and he'll address the question then after the presentation.

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00:06:09,480 --> 00:06:14,880

That's why it's about questions. We will address your questions later.

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00:06:14,880 --> 00:06:19,290

This is real informal. The only thing I do, I ask questions.

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00:06:19,290 --> 00:06:26,190

You know one at a time be patient. If somebody has a question and it takes a little longer if they want an answer

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00:06:26,190 --> 00:06:32,190

Let everybody get their questions answered.

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00:06:32,190 --> 00:06:37,260

That's what this meeting is about. But the meeting is about the forestry management plan.

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00:06:37,260 --> 00:06:45,600

So let's, you know, try to keep focused on what we're here in ways we when they meet again, we'll do that.

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00:06:45,600 --> 00:06:52,110

CHUCK CULVER: We have one more introduction

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00:06:52,110 --> 00:06:55,820

We have Brandon Dixon here representing the Governor's Office

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00:06:55,820 --> 00:07:03,330

SHAWN CLARK: All right. I'm sorry about this.

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00:07:03,330 --> 00:07:16,470

I’ll be looking for another job after the meeting.

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00:07:16,470 --> 00:07:21,240

Let me let me address. That's the best way to address that a little bit. So we're going to be here.

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00:07:21,240 --> 00:07:25,350

So again, once you have made it right, that's kind of what it is.

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00:07:25,350 --> 00:07:32,520

COMMITTEE MEMBER: That's what I have to address that John and I have our position, but we don't let it go through.

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00:07:32,520 --> 00:07:36,120

KYLE CUNNINGHAM: OK, but I apologize. But yeah, yeah, let me address that.

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00:07:36,120 --> 00:07:41,280

So what I would say as I'm going through my presentation and Mike's going through his presentation,

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00:07:41,280 --> 00:07:47,100

if you need a clarification on a definition or harvest practice or something that I have up here for sure,

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00:07:47,100 --> 00:07:52,920

stop me right then and let's get that clarified. But if you have a question that's going to lead to a broader discussion, make a note of it.

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00:07:52,920 --> 00:07:57,720

And then we'll get to that at the end of the presentation, OK?

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00:07:57,720 --> 00:08:05,370

SHAWN CLARK: Again, make yourself at home, were gonna shut the lights, anybody writing anything?

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00:08:05,370 --> 00:08:09,270

If you need lights on let us know.

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00:08:09,270 --> 00:08:15,390

See the slide better. Make yourself at home.

71

00:08:15,390 --> 00:08:22,740

So with that said, I'll turn it over to Kyle here.

72

00:08:22,740 --> 00:08:28,590

KYLE CUNNINGHAM: I'm glad to have a room full of people here that are interested in this resource that we have over here.

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00:08:28,590 --> 00:08:32,530

And before I jump into that, I need to know who I am. I'm sending him.

74

00:08:32,530 --> 00:08:36,820

I'm associate professor of the University of Arkansas Division of Agriculture.

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00:08:36,820 --> 00:08:39,900

And I've got a couple of slides to show you my background here in the moment.

76

00:08:39,900 --> 00:08:46,560

But today I'm going to talk with you about I'm going to try not to use this, but I'll move around a little bit.

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00:08:46,560 --> 00:08:48,850

So I'm not. Speak loudly enough, let me know.

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00:08:48,850 --> 00:08:55,470

And if we do have the microphone, I'll stand still. You should have an agenda in front of you that shows our topic for today.

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00:08:55,470 --> 00:09:03,450

I'm covering our forest resources here on the station. The management of associated with the land cover types we have here on the station.

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00:09:03,450 --> 00:09:09,120

And then I'm going to introduce some concepts that we have developed over the years that are driving this management.

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00:09:09,120 --> 00:09:15,030

So it's based on research everything that we're presenting here today. And that's one of the some of the things that I want to point out.

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00:09:15,030 --> 00:09:20,670

And then we've got of our division foresters going to come out and talk about the sustainable harvest plan that we have for all of our

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00:09:20,670 --> 00:09:28,040

research stations. He is really going to focus here on Pine Tree and where we're going moving forward with harvesting here on the station.

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00:09:28,040 --> 00:09:31,200

OK. You should have the plan itself in front of you.

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00:09:31,200 --> 00:09:38,310

It's called managing our forest lands. Everybody should have a copy of that that is available on the web as well.

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00:09:38,310 --> 00:09:44,070

And our AES web page. If you go to research locations and go down to the bottom of the page of the web link

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00:09:44,070 --> 00:09:50,730

and you can click on each section or each research station and find information there.

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00:09:50,730 --> 00:09:57,990

And this plan to well, you have a copy of my presentation and you have a copy of Mike's presentation as well.

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00:09:57,990 --> 00:10:02,310

And so you need to look for their take notes and make questions where you need to.

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00:10:02,310 --> 00:10:09,930

And there we have those resources for you. Again, we really we came up Mike and I came over on Tuesday and we went out to the woods.

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00:10:09,930 --> 00:10:16,740

We had an active shelter wood in place. You're going to hear us talk about shelter wood throughout my talk and throughout my call and how

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00:10:16,740 --> 00:10:21,510

we implement those and why they're important to us here at the station at this point in time.

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00:10:21,510 --> 00:10:26,970

But we went over there and looked at the current shelter wood and we just had everything we wanted to talk about.

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00:10:26,970 --> 00:10:29,220

And I hate that we have storms and wind coming.

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00:10:29,220 --> 00:10:36,630

But when you have a 100 year old hardware and having a group this size in their wind blowing, it's not a good thing.

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00:10:36,630 --> 00:10:41,490

So we probably unless less the weather clears up and some people want to go.

97

00:10:41,490 --> 00:10:44,040

We probably I have some slides. We took me the other day.

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00:10:44,040 --> 00:10:49,260

We can do that, but we can address that at the end of our of our presentation as to whether or not a group wants to go over there.

99

00:10:49,260 --> 00:10:54,090

The other thing I'll say is Mike and I are both available. I'm in Little Rock.

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00:10:54,090 --> 00:10:59,670

Any time you want tour anything out here, we're available to do that and happy to do that.

101

00:10:59,670 --> 00:11:05,010

So again, thank you for coming today and let me go ahead and give it a little bit about me.

102

00:11:05,010 --> 00:11:12,750

Initially, I'm from over in Mississippi, originally the don't hold that against me, but I did grow up over the Mississippi.

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00:11:12,750 --> 00:11:17,670

I got my bachelor's and my masters, Mississippi State in Forest Management and working on my master's,

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00:11:17,670 --> 00:11:24,600

where I really started getting into hardwood and really develop a passion for managing hardwood forests in the south.

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00:11:24,600 --> 00:11:28,810

And that's where that really started. And then I came over here about 18 years ago.

106

00:11:28,810 --> 00:11:31,320

I went to work the Division of Agriculture,

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00:11:31,320 --> 00:11:38,220

initially as an extension instructor and completed my Ph.D. while I was doing math works of Arkansas Little Rock.

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00:11:38,220 --> 00:11:42,060

In there (inaudible) program and I moved in a little deeper

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00:11:42,060 --> 00:11:46,710

But we started looking at the ecology and the physiology of the hardwood regeneration,

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00:11:46,710 --> 00:11:57,990

and that particular study there was actually implemented in a lab stock at the research station, and it's highlighted in your plan.

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00:11:57,990 --> 00:12:02,430

It's actually the plan again. I've been here for about 18 years.

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00:12:02,430 --> 00:12:06,870

I've heard 70 percent extension and 30 percent research.

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00:12:06,870 --> 00:12:13,200

And so I spend a lot of my time doing this right here talking to landowner groups. I do a lot of work with our professional foresters in the state.

114

00:12:13,200 --> 00:12:18,140

On continuing education for them and across the region.

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00:12:18,140 --> 00:12:23,540

Thirty percent research, I do have active research on the station and across all of our stations

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00:12:23,540 --> 00:12:33,940

primarily here, and you can see my research scientist on there from a really hard look on the.

117

00:12:33,940 --> 00:12:41,380

Some of the things that I have worked on here in the station over here, down here from an extension standpoint.

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00:12:41,380 --> 00:12:42,370

Back in 2000,

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00:12:42,370 --> 00:12:52,870

I believe in 2017 we had a registered bar training here where we got into the bottom lands and did a training for a professional part of.

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00:12:52,870 --> 00:12:57,520

But we did things by looking at site quality evaluation, some of the ecology and management.

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00:12:57,520 --> 00:13:05,500

But more importantly, I've also been able to take that information and implement it in my presentations across the site.

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00:13:05,500 --> 00:13:10,910

Really, the data that we've collected from here and the experiences that here across the.

123

00:13:10,910 --> 00:13:17,380

And so it's not just doing what we're doing here that I'm able to take that information faster.

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00:13:17,380 --> 00:13:28,540

And in 2019, we had a delegate from China come from done research for research from the Xingxi (?) Academy of Forestry.

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00:13:28,540 --> 00:13:34,810

And they were touring across the south. And this is one of the locations that was chosen for them to come and view

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00:13:34,810 --> 00:13:39,880

some of the research that I was particularly working on at that time. And we work with the Forestry Commission.

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00:13:39,880 --> 00:13:49,440

We have David Oaks here today from the Arkansas Forestry Division Department of Ag Forestry Division and worked really closely with them.

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00:13:49,440 --> 00:13:55,200

On the research side, my partner in crime right here.

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00:13:55,200 --> 00:14:02,470

My son was older than that now. The first thing now, but he's always helping me measure and things like that.

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00:14:02,470 --> 00:14:09,930

But that's one of the studies that we were looking at some of the improved cherry bark oaks that the forestry division produces at the Faulkner Nursery.

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00:14:09,930 --> 00:14:16,460

We're doing some field trials to take their families in the field for their improvement from.

132

00:14:16,460 --> 00:14:21,620

This is one of our shelter wood. You'll see a lot of our shelter woods today. It's going to start getting some images here.

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00:14:21,620 --> 00:14:27,830

This was part of a cutting demonstration that was about three hundred and twenty acres of only part of it.

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00:14:27,830 --> 00:14:39,530

But you can see the shelter tree in the background, and you can see the regeneration does not appear in particular, but developing into some plant.

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00:14:39,530 --> 00:14:45,390

We have mixed species planting just down the road here. And again, the Red Oak inter planted with short leaf pine

136

00:14:45,390 --> 00:14:50,450

So we're just looking at some different species mixes where we could have a mixed forest that we're managing.

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00:14:50,450 --> 00:14:53,510

So that's one of the things we've had some refereed journal pubs.

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00:14:53,510 --> 00:15:00,530

One in particular was one that I was working on improving species composition and some of these plants for the greater good overall.

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00:15:00,530 --> 00:15:10,430

But we have had a good bit of activity here over the years, and I certainly have minute OK,

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00:15:10,430 --> 00:15:20,130

So our AES forest lands, as I can just give you an idea of what you have to say at the end of the day, the forest or other locations, not where we are.

141

00:15:20,130 --> 00:15:26,750

Here's your primary research station. We also have a research station it they still want to avoid just west of Fayetteville.

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00:15:26,750 --> 00:15:33,570

And then we have the Southwest Research Extension Center in your home and my work is primarily focused on the issues.

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00:15:33,570 --> 00:15:37,040

But and I have quite a bit running.

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00:15:37,040 --> 00:15:42,740

Mike, it's kind of a partner in crime in the woods, and we've had quite a few demonstrations and research projects.

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00:15:42,740 --> 00:15:51,170

And that's one of the things I want to point out as I move through my presentation is the difference between research and management.

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00:15:51,170 --> 00:15:59,390

And so some of these projects that I'm talking about, that I'm doing research on that may be five or 10 a year and that's a real small land area.

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00:15:59,390 --> 00:16:10,390

But when we're talking about management, we're talking about the broad scale across hundreds or thousands of acres.

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00:16:10,390 --> 00:16:16,970

OK. One of the things always lead off with when I do a hard fork, when I'm talking about professional harvesters,

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00:16:16,970 --> 00:16:24,160

the landowner group or an interest group, what we have no stakeholders is hardly part of management.

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00:16:24,160 --> 00:16:29,920

We generally take a little while to build and I have to you have to eat your spinach.

151

00:16:29,920 --> 00:16:35,410

And so I have to give you some concepts and some and some operations that we do in part with management.

152

00:16:35,410 --> 00:16:42,610

The harvest will be kind of a learning process and building process, and then we'll how we got that into our plan.

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00:16:42,610 --> 00:16:46,490

And hopefully, you can develop some discussion questions.

154

00:16:46,490 --> 00:16:52,660

One of the first slides I always present is why are we managing these things while we're managing our

155

00:16:52,660 --> 00:16:58,120

hardwood forest and really anywhere in the state when you're talking about the upland or the bottom?

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00:16:58,120 --> 00:17:02,530

We're talking about multiple objective manner for most landowner hardwoods.

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00:17:02,530 --> 00:17:10,180

It's not just one of these things they're after thereafter. Thereafter, they might want a timber component, but we also want that wildlife involved.

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00:17:10,180 --> 00:17:16,090

I have I have landowners that specifically manage for esthetics.

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00:17:16,090 --> 00:17:22,100

They could care less if they ever put a tree down on their property. They just want it to look nice off their property.

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00:17:22,100 --> 00:17:34,630

up in the Ozark through the valley or whatever. And so there's different objectives and different criteria for different landowners.

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00:17:34,630 --> 00:17:39,880

But that's one of the pluses. Oh, man.

162

00:17:39,880 --> 00:17:47,380

If I have a pine plantation and severe county and I spent all this money on site preparation purchasing genetically,

163

00:17:47,380 --> 00:17:51,970

pine and really putting a lot of money into the front end of that.

164

00:17:51,970 --> 00:17:59,110

I really have one objective and that's rate of return. That's a different kind of landowner than us that are managing hardwoods.

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00:17:59,110 --> 00:18:04,990

And so we kind of have our goals on the station of me or mimic what a landowner

166

00:18:04,990 --> 00:18:09,160

would want to do on their farm and different landowners will have their objectives.

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00:18:09,160 --> 00:18:13,600

But what we're trying to accomplish here is multiple objectives.

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00:18:13,600 --> 00:18:21,280

And so that really starts in my opinion it with this very important overall Forest Hills and first.

169

00:18:21,280 --> 00:18:26,530

If you don't have a healthy forest that has proper species composition, that has a quality.

170

00:18:26,530 --> 00:18:33,970

You're not achieving these other goals. It starts with having proper species on site, properly managed forests.

171

00:18:33,970 --> 00:18:43,800

And so that's where we start. And then we had other objectives, but to improve our side of the waterfall,

172

00:18:43,800 --> 00:18:49,410

improve our habitat for native species, including their turkeys for and rather,

173

00:18:49,410 --> 00:18:57,390

I know there's a lot of interest from hunters in those outside, and I hung over here, over here and other comments from that standpoint as well.

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00:18:57,390 --> 00:19:06,780

But again, we have to meet those folks. But our goal is to be able to take the management here and the research here and

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00:19:06,780 --> 00:19:10,190

send it out to the public and say if you want to manage your lands in this way,

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00:19:10,190 --> 00:19:20,620

if don't see what we have. And that's why I'm really glad we're at a point right now where we can emphasize that more than we have.

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00:19:20,620 --> 00:19:24,490

OK, if you're going to hear us talk about OWS and why are we going to health and why do

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00:19:24,490 --> 00:19:30,970

we have some species as far as that goes back to that previous slide pretenders,

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00:19:30,970 --> 00:19:38,470

OK species, they have high utilization as we know very valuable forest products.

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00:19:38,470 --> 00:19:41,350

They're relatively fast compared to other hardwoods,

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00:19:41,350 --> 00:19:47,860

such as your history and other things they can help remove from a wildlife standpoint or mass production.

182

00:19:47,860 --> 00:20:00,160

We have to have that. What are you talking about? Squirrels or nuts? They need items that we all know the value of a mature farm.

183

00:20:00,160 --> 00:20:08,330

Water and air quality, the environmental aspect of this. They're long live system or long live species.

184

00:20:08,330 --> 00:20:14,030

They have large groups of large crowd here, so they sequester carbon for a long period of time.

185

00:20:14,030 --> 00:20:21,800

They provide stability in the soil, they clean the water. So oats are really beneficial to this for all of these objectives.

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00:20:21,800 --> 00:20:27,980

And so therefore, our management is designed not necessarily to create only oak species on this forest out here,

187

00:20:27,980 --> 00:20:36,540

but to make sure that the forest stands have a component of oak in them and a significant component of

188

00:20:36,540 --> 00:20:45,100

Some of the important oak we have, cherry bark oak. Which is really from a timber standpoint, that's what we always try to grow,

189

00:20:45,100 --> 00:20:51,520

but we can't really get into too much detail before we can spend the whole day talking about this one particular subject.

190

00:20:51,520 --> 00:20:59,590

They don't go everywhere well. So cherry oak has a very small set of five conditions that will perform or perform well.

191

00:20:59,590 --> 00:21:10,010

Not all Oak can take a little bit more water. Shumard Oak with another industry that a lot of water will actually when we do a harvest on tap water willow.

192

00:21:10,010 --> 00:21:17,350

And on this station can be a problem because when they get older, they get hollowed out of the harvesting of water and willow.

193

00:21:17,350 --> 00:21:25,260

But a lot of times those species can impact the value later down the road. They're still very valuable wildlife products.

194

00:21:25,260 --> 00:21:30,000

They do have timber that they don't have.

195

00:21:30,000 --> 00:21:34,410

Well, we see some of the oaks that you typically see in the other.

196

00:21:34,410 --> 00:21:43,190

We have a lot of white oak here on the station But this concept of all of bottomland bottom in terrace in a little bit.

197

00:21:43,190 --> 00:21:50,780

And that's just talking about when I refer to Bottomland, I'm referring to referring to forests where we have active flooding as in place.

198

00:21:50,780 --> 00:21:56,600

So those are the alluvial plains of the plains that flood first on (inaudible) and second

199

00:21:56,600 --> 00:22:03,740

talk about a bottomland and I’m talking talk about something that's come out of its banks and flood.

200

00:22:03,740 --> 00:22:11,270

And then when I'm talking about terrace, I'm talking about a site that used to be that alluvial plain, but it's no longer in there.

201

00:22:11,270 --> 00:22:16,340

Now it doesn't flood, and it actually (inaudible)

202

00:22:16,340 --> 00:22:21,120

Overcup, that's the one that can take the most water out of all of our oaks

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00:22:21,120 --> 00:22:32,720

We do have overcup on the station in places, and so we have a mix all the way from upland hardwood species to your wettest bottomland species on the station

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00:22:32,720 --> 00:22:38,570

What I would like to do is walk through the different cover types on the station and

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00:22:38,570 --> 00:22:46,190

then kind of hit on the associated management that goes with those types.

20

00:22:46,190 --> 00:22:59,430

This is under your management plan, under managing our forest lands our pine tree station, but it's in there.

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00:22:59,430 --> 00:23:06,830

So basically, here's our cover type. And if you look at this map areas in beige here those are agricultural area.

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00:23:06,830 --> 00:23:14,180

Let's talk about those areas. That's not my area. Basically, if I'm going to leave that alone and Shawn talk about those areas.

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00:23:14,180 --> 00:23:19,820

But anyway, I really don't know what I'm talking about, but I do know what I'm talking about.

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00:23:19,820 --> 00:23:25,520

We get into the forest and you'll notice here this this orange.

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00:23:25,520 --> 00:23:30,380

These aren't probably going to on here. Those are areas that are mature far from pine trees.

212

00:23:30,380 --> 00:23:35,930

They represent a large percentage of this nation. And so they're driving a lot of our management here.

213

00:23:35,930 --> 00:23:42,320

And I talked about the shelter would harvest. And that's why we're going to walk through while we do shelter with harvest.

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00:23:42,320 --> 00:23:47,360

I'm going to start it and then Mike's going to finish it when he gets into sustainable harvest.

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00:23:47,360 --> 00:23:54,210

But that's really the need right now from a partnership standpoint. What do we do with this idea of what we have out here?

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00:23:54,210 --> 00:24:02,570

And so we do have a lot of timberlands, and I'll talk about this is First Creek, which is just down the road from the research station.

217

00:24:02,570 --> 00:24:05,870

Here we're located, the base is right up the road to the West.

218

00:24:05,870 --> 00:24:13,550

And then we have Second Creek, which is over in south central west, central portions of the station that we're living.

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00:24:13,550 --> 00:24:20,120

We do have some emerging wetlands and I was hoping that Dr. Osborne would be here today from UAM.

220

00:24:20,120 --> 00:24:24,020

He had a fever. You can't be here. So you have a fever.

221

00:24:24,020 --> 00:24:28,820

Don’t show up, but , but he is working with us.

222

00:24:28,820 --> 00:24:33,170

And I also need to up while I work (my counterpart with

223

00:24:33,170 --> 00:24:38,960

Becky McPeake. She's a wildlife ecologist there in Little Rock Extension, and she and I work very closely together.

224

00:24:38,960 --> 00:24:48,530

She has looked second creek here and this here, as well as Dr. Osborne about what their recommendations were on that, moving forward

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00:24:48,530 --> 00:24:53,930

One person we need to point out on this wildlife site is Rob Willy is be in the room, and I don't think we introduced him

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00:24:53,930 --> 00:25:03,720

Yeah, he is the habitat for nature for Game Fish Commission and Rob and I work closely together,

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00:25:03,720 --> 00:25:08,920

try to help each other out when we can, but we'd be very similar functions in both of our (inaudible).

228

00:25:08,920 --> 00:25:20,000

That we did have some pine stands here on the station. And those are really remnants from previous silviculture research done on the site (UAM)

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00:25:20,000 --> 00:25:25,130

So some of our previous silvicultural professors that were down there looking at different sites,

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00:25:25,130 --> 00:25:31,040

but 20 years ago, we're sitting there looking at different species and different from like that.

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00:25:31,040 --> 00:25:37,530

Now we have this stand in place and we're looking at what could we do with the timing of the science.

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00:25:37,530 --> 00:25:42,590

In fact, we have CERP grass, the bright green areas.

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00:25:42,590 --> 00:25:45,330

They're no longer concrete, but we still manage them address.

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00:25:45,330 --> 00:25:51,020

And that's one of the collaborations we have with the Fish Commission is that if they help us to burn those fields,

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00:25:51,020 --> 00:25:57,360

Shawn and his crew will go in and do some discing and mowing. And then Game and Fish has a prescribed fire.

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00:25:57,360 --> 00:26:02,630

They have a five year plan on how they burn fields, and so their partner puts on that.

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00:26:02,630 --> 00:26:05,240

That's one of the areas that I would like to see us expand,

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00:26:05,240 --> 00:26:10,640

and I'm going to talk about where we can incorporate some prescribed fire in some of our terrace site hardwoods.

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00:26:10,640 --> 00:26:14,640

I talked about we have the local hardwood species.

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00:26:14,640 --> 00:26:20,760

So there's an opportunity to incorporate fire into some of the woodlands we've already gotten one burned here, but there's an opportunity, there's more.

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00:26:20,760 --> 00:26:26,820

We have to be really, really careful with fire and hardwoods, particularly when you drop them into that alluvial plain,

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00:26:26,820 --> 00:26:31,620

the floodplain, because those species are thinned bark. And so we can talk about that more.

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00:26:31,620 --> 00:26:38,340

Let's getting more of it. I'll just say any burns we do here will be in January, February, March.

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00:26:38,340 --> 00:26:48,660

You won't see light a fire out here August. That's not going to. But we managed to see our progressing as part of that, and I hope that after all,

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00:26:48,660 --> 00:26:51,990

that's where a lot of the research projects that you follow me and my planned

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00:26:51,990 --> 00:26:58,230

establishment research for a lot of that occurred at that time last year,

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00:26:58,230 --> 00:27:10,700

it was down to the South. So let's walk through each of these, I need a little bit of information on these threat before I do that.

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00:27:10,700 --> 00:27:12,650

We did have reviews,

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00:27:12,650 --> 00:27:18,890

approvals and recommendations for this plan from the Arkansas Game and Fish Commission from the Arkansas Department of Agriculture,

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00:27:18,890 --> 00:27:24,410

Forestry Division from the USDA Forest Service Center for Hardwood Research.

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00:27:24,410 --> 00:27:32,750

All of these groups reviewed the plan, approved the plan that we have submitted, and then they gave us some input on how to improve it.

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00:27:32,750 --> 00:27:36,590

And I'm really glad every all three of them … our harvest plan is sound.

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00:27:36,590 --> 00:27:39,960

And that's what we do best. The best thing that Mike and I do.

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00:27:39,960 --> 00:27:46,340

The forest management, where they asked us to beef up the plan a little bit was on the wildlife management sidte.

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00:27:46,340 --> 00:27:49,760

And so you see that in the plan. We've interjected some of it.

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00:27:49,760 --> 00:27:58,490

But you know, from that aspect, there are certain things to be evolving over time and this is what this is where we are right now.

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00:27:58,490 --> 00:28:06,110

Let me throw out some of the hurdles of harvesting that we have over here. As you know, we're a long way from Pine Bluff.

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00:28:06,110 --> 00:28:12,650

And so when we want to cut from the wood pulp wood over here, it's not always the easiest thing in the world to be the hardwood soft,

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00:28:12,650 --> 00:28:21,800

but we can move on and you can move pretty much anywhere in. But the pulp wood is a real problem and we can move it.

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00:28:21,800 --> 00:28:26,180

But sometimes we have to wait till the right weather conditions are occurring across the state.

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00:28:26,180 --> 00:28:30,650

And that factor in the other side of the weather, though, is when we get too wet over here.

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00:28:30,650 --> 00:28:34,520

We're about to do the harvest when we don't harvest in.

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00:28:34,520 --> 00:28:40,670

Typically, we're going to harvest the pointy the end of June, 1st of July and then through maybe the middle of November.

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00:28:40,670 --> 00:28:44,760

That's really our harvest window, but we can't sell it year round on this land.

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00:28:44,760 --> 00:28:54,060

But with. The availability of buyers and harvesters, mostly most of the buyers harvesters over in the western part of the state around over here.

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00:28:54,060 --> 00:29:00,920

But this is not to say yes, we are.

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00:29:00,920 --> 00:29:12,570

So is the stations open to public

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00:29:12,570 --> 00:29:22,610

but the other flipside. I think we'll get into that is a harvest aren't that large in lots of ways.

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00:29:22,610 --> 00:29:27,890

Yes. But the weather typically not the sun. But that's a good question.

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00:29:27,890 --> 00:29:32,420

Yes. The difference between hardwood and bulk space.

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00:29:32,420 --> 00:29:36,110

No, no, no. No. I've probably skipped through that.

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00:29:36,110 --> 00:29:44,990

But so it's all hardwood except for compensation. But so the soft timber that once we get over a diameter of about 14 inches.

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00:29:44,990 --> 00:29:51,710

Anything we can make a board out of that soften some of the smaller material.

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00:29:51,710 --> 00:29:55,760

And that's it's just it's just a value problem.

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00:29:55,760 --> 00:30:06,980

A lot of the harvesters they don't like hauling of product doesn't have a lot of value and it's like quite a business.

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00:30:06,980 --> 00:30:09,450

And unfortunately, Pine Bluff is way off,

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00:30:09,450 --> 00:30:15,980

but it's really from a major public pulp wood standpoint is really the only mill we have right now in the whole state.

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00:30:15,980 --> 00:30:22,370

Just taking hardwood pulp here down in, the mill down in southwest Arkansas, it has really shifted over to mostly pine prive.

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00:30:22,370 --> 00:30:25,490

And so you know that that throws in there trying.

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00:30:25,490 --> 00:30:30,950

Now Pine Bluff is trying to facilitate everything in the western part of the state, but we come to them from here.

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00:30:30,950 --> 00:30:34,820

They don't really make our wood, so that's kind of all subject a little bit.

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00:30:34,820 --> 00:30:38,970

But those are some of the hurdles we have. And that's just we're running out of harvest.

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00:30:38,970 --> 00:30:44,570

Logger availability is an issue. Whether you're in Saline County or here,

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00:30:44,570 --> 00:30:59,490

a lot of the mills are sucking up our harvesters and and those are just hurdles we have to deal with and no matter what our realities are, that.

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00:30:59,490 --> 00:31:09,180

And introduce my buddy there, anybody who lives over here knows he's not near as cute as he looks on that screen.

286

00:31:09,180 --> 00:31:16,500

We have had issues with beavers way before I was here or really anybody associated with this was here back in the 90s that we had.

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00:31:16,500 --> 00:31:23,370

Here is when you saw me show the slide about the emergent wetlands, and there is a long first group that I call called the flooded timberlands.

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00:31:23,370 --> 00:31:30,090

We can thank that guy right there. And that was actually several a couple of decades ago now really with that.

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00:31:30,090 --> 00:31:35,100

But this was the result of some of the damage that was done here before the big bands were there.

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00:31:35,100 --> 00:31:36,990

That was a pine and hardwood forest.

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00:31:36,990 --> 00:31:45,510

That was the alluvial forest, that was flooding before the natural flood and regimes in the water would come up.

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00:31:45,510 --> 00:31:49,650

And so there was significant damage to those forests.

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00:31:49,650 --> 00:31:55,800

And so we've looked at that and there were about 50 100 total acres impacted.

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00:31:55,800 --> 00:32:00,390

And we've looked at that and tried to come up with a plan on how we're going to deal with that going forward.

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00:32:00,390 --> 00:32:06,610

The damage is done. Can't go back and fix that, but after we make it better.

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00:32:06,610 --> 00:32:12,490

So the first one we're going to talk about is her previous that's usually the frame right down the road.

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00:32:12,490 --> 00:32:17,260

If you drove over it coming in, you might have noticed the water is not out of the banks.

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00:32:17,260 --> 00:32:25,390

And one of the reasons for that, this man right here in line and some people have been trying to go in and remove the beaver dams and

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00:32:25,390 --> 00:32:31,300

do some trapping and whatnot in there and get that back to a natural flood routine in the first creek.

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00:32:31,300 --> 00:32:34,930

And if that did not have happened, that water would have been up near the house.

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00:32:34,930 --> 00:32:43,840

And that's what. So what we decided here is on first rate, we were going to continue to work on our beaver control program,

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00:32:43,840 --> 00:32:46,800

a beaver dam, and we do parks and improvement.

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00:32:46,800 --> 00:32:52,930

And so you see, the reservoir is coming back in these areas and there's a host of species in there right now.

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00:32:52,930 --> 00:33:00,460

There are some oak in there, but there's a host of species in there. Some of those are species we don't want to manage that are invasive.

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00:33:00,460 --> 00:33:06,640

Chinese privet and those types of things Hardwoods And there's also maybe in places of species,

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00:33:06,640 --> 00:33:10,750

composition problem because it wasn't properly naturally regenerated.

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00:33:10,750 --> 00:33:16,810

We're going to persist for the sake, right? But there's an opportunity for us to go in there and do forestry and improvement.

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00:33:16,810 --> 00:33:19,110

And as that new forest develops in there,

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00:33:19,110 --> 00:33:28,020

you get the proper species in there that are going to meet our productivity of forest and our wildlife component that.

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00:33:28,020 --> 00:33:35,320

You can see the picture was taken. They have been for a year and half.

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00:33:35,320 --> 00:33:40,210

If you see the water down, it normally would be all the way out of by itself.

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00:33:40,210 --> 00:33:44,440

That's not an easy thing to do. People control and they don't control.

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00:33:44,440 --> 00:33:50,260

You go in there and the immediate problem and in a couple of years, you're right, but having to deal with.

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00:33:50,260 --> 00:33:57,440

So that's an ongoing issue here on the. It's not a one time.

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00:33:57,440 --> 00:34:04,250

The area I want to talk about emergent wetlands, this is this area here in the middle portion.

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00:34:04,250 --> 00:34:10,300

You might if you're familiar with Brown's school, that's what we're talking about, I guess right in there somewhere.

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00:34:10,300 --> 00:34:18,950

Not that right in here. So anyway, the photograph was taken on the bridge on our route.

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00:34:18,950 --> 00:34:26,120

on the road down there. looking northward. And so this is what we're referring to as the emergent wetland.

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00:34:26,120 --> 00:34:36,650

So this is a new wetland that has occurred there. And I kind of I kind of like the way it looks, but then I realized there was some value in there.

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00:34:36,650 --> 00:34:46,040

But I had Becky McPeak, a wildlife ecologist, and Doug Osborn, our waterfowl professor, and look at that with me and Mike Lee, too.

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00:34:46,040 --> 00:34:51,560

And when I say, I mean, we knock one here.

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00:34:51,560 --> 00:34:58,700

But anyway, both of them said, I've talked about doing some bottomland hardwood restoration work, and they're similar to what we're doing on Earth.

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00:34:58,700 --> 00:35:01,190

And both of them said, Well, you know,

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00:35:01,190 --> 00:35:08,780

wildlife ecologists really would probably want you to continue to manage that as it is being developed so well into this wetland

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00:35:08,780 --> 00:35:17,060

And so we thought about that and said, Okay, we could we could do bottomland restoration work on First Street and then do the submerged wetland or

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00:35:17,060 --> 00:35:25,880

Second Creek and make two different criteria and demonstration and educational opportunities from those.

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00:35:25,880 --> 00:35:30,740

That's what we're planning for that it's really.

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00:35:30,740 --> 00:35:35,160

And Dr. Osborne pointed out to me, you said it's not just the ducks that will use this,

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00:35:35,160 --> 00:35:42,250

a lot of wading birds and things we don't typically think about when we talk about creating wetlands for waterfowl.

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00:35:42,250 --> 00:35:51,150

That, meanwhile, but it's really unique that it's not a threatened habitat that it's certainly not a fan of.

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00:35:51,150 --> 00:35:57,600

We will seek input from the wildlife biologist for habitat evaluation, motor and operations,

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00:35:57,600 --> 00:36:02,160

the maritime and resource plant communities of the three communities are there.

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00:36:02,160 --> 00:36:05,760

What can we do to enhance that? And some of that?

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00:36:05,760 --> 00:36:17,850

I'm not the person to answer that. That's what we're going to need input from our Game Fish collaborators as well as from the laboratory model myself.

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00:36:17,850 --> 00:36:23,100

pine stand. which means they are here and they are in need to finish.

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00:36:23,100 --> 00:36:30,660

And we're not the only place. There's a lot of landowners in this part of the state that back twenty, twenty-five years ago, 30 years ago,

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00:36:30,660 --> 00:36:36,930

Planted pine and nobody told them there wasn't going to be a market for it once they got to be 20 years old.

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00:36:36,930 --> 00:36:41,810

And now we do CRP programs in our county.

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00:36:41,810 --> 00:36:45,630

It's like a plant forward, but we have those here and again.

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00:36:45,630 --> 00:36:51,800

Some of these were research oriented anyway. Actually, most of them were, but they're all.

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00:36:51,800 --> 00:36:58,350

We have about 100 acres, so they're all approaching the age of first thing.

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00:36:58,350 --> 00:37:02,550

And so what we're going to try to do is we have a chocolate harvest or we're doing our first step,

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00:37:02,550 --> 00:37:05,910

which is we're going to try to incorporate these into that.

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00:37:05,910 --> 00:37:10,510

Maybe get some of that move because if we don't, we're going to have an insect problem there.

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00:37:10,510 --> 00:37:18,640

We don't finish. It will be threatened by some. And so we want to make sure we're to make sure that are sustainable.

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00:37:18,640 --> 00:37:28,070

At this time, the top brass and within is about 100 or so, and I have a problem approximately here, I may just laugh about some ground truth.

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00:37:28,070 --> 00:37:35,830

That could be a little bit of plus or minus. Here we have to talk about this, we have this thing before I fire her,

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00:37:35,830 --> 00:37:43,270

and it's collaboration between Sean and Dana Bash and getting this burn and that creates a really good cover.

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00:37:43,270 --> 00:37:47,920

One of the things I've noticed with my son over here is you get from this point,

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00:37:47,920 --> 00:37:56,110

forward cover becomes a commodity overview and they print for good November and through December.

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00:37:56,110 --> 00:38:09,750

But you get into the dormant season you need to cover, and that's really for the wildlife species, those grass and really play a role over your not.

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00:38:09,750 --> 00:38:14,820

Again, that's where the back of one of my projects where we hope that if planted in these times,

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00:38:14,820 --> 00:38:19,770

that's a regretful record that we don't plan a lot of time out here.

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00:38:19,770 --> 00:38:33,240

But I had been doing a part of this that we point out these are great areas for research on vegetation control.

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00:38:33,240 --> 00:38:41,670

I work pretty extensively with past herbicides a couple of years ago, produce a farm I should have brought with me three,

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00:38:41,670 --> 00:38:50,970

which is the bulk of us recommendation for herbicide applications front of a lot of the back up.

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00:38:50,970 --> 00:38:58,860

Some of the recommendations we're sending out also help reduce employee for the body.

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00:38:58,860 --> 00:39:06,750

And then we are establishing working with Forestry Division for about planting to improve not only security,

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00:39:06,750 --> 00:39:14,430

but the organization to see how it performs the. OK, our mature hardwood forest, and that's really where only this is nice,

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00:39:14,430 --> 00:39:20,830

because that's the bulk of what we're going to be talking about as far as any real active management or harvesting is concerned.

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00:39:20,830 --> 00:39:24,090

And that's going to raise some eyebrows and you've got more information.

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00:39:24,090 --> 00:39:27,510

The first thing I'm going to tell you is we're not going to go down here to fight for

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00:39:27,510 --> 00:39:31,740

free and start what's happening at the station and then stop when we get up here.

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00:39:31,740 --> 00:39:36,180

That's not going to happen. But we have a plan, the sustainable.

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00:39:36,180 --> 00:39:42,540

It's going to cut relatively small areas of forest and regeneration.

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00:39:42,540 --> 00:39:48,460

It's not just cutting the forests, just cut some trees. And so that's why I refer back to the chocolate harvest.

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00:39:48,460 --> 00:39:54,420

This is the heart of the place over a period of time. And it's designed to bring back into that state.

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00:39:54,420 --> 00:40:00,160

And if we just go out there and haphazardly cut through those forests, we won't have any.

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00:40:00,160 --> 00:40:06,880

So there's a method to doing make sure we're cutting down the forests are mostly.

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00:40:06,880 --> 00:40:11,930

That means that the frost trees are oaks that we're trying to grow are relatively the same age.

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00:40:11,930 --> 00:40:18,930

So they may they may range from a lot of these they have. They may range from 80 to 90 to over 120 years old.

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00:40:18,930 --> 00:40:24,150

Their old parts and many of them are in need of regeneration or we're going to

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00:40:24,150 --> 00:40:28,710

see them start with the territory and then that's not going to look very simple.

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00:40:28,710 --> 00:40:40,300

So that's kind of where we are with the bulk of the station. I talked about the father being there for most of your heart, the forest across the site,

375

00:40:40,300 --> 00:40:47,860

or even if you try to do uneven eight-man where you have like three or more eight plants in a forest,

376

00:40:47,860 --> 00:40:55,660

you can do it for this very, very difficult, especially when you get this far in the midst of the there.

377

00:40:55,660 --> 00:41:02,680

So we're trying to do even a massive effort that include making sure we're addressing wildlife needs the plantation.

378

00:41:02,680 --> 00:41:12,870

But you're not a quite a bit of research what you.

379

00:41:12,870 --> 00:41:19,190

No, back, I was going to go in for your job on my own and wildlife management for.

380

00:41:19,190 --> 00:41:27,900

I got to look for a job was six thousand dollars to be sent to Europe and no one more here and I could teach physics and chemistry and biology,

381

00:41:27,900 --> 00:41:37,860

and that's what I'm doing. But that even age is exactly opposite of what, a hundred or a hundred eight.

382

00:41:37,860 --> 00:41:45,430

The people go there that are managing for timber and public use.

383

00:41:45,430 --> 00:41:53,670

There looking for uneven aged stand t, and we've got a lot of ideas already, and that's what they want because that's the best way forward.

384

00:41:53,670 --> 00:42:02,190

I walked 15 miles and it was last week, the week before that I was 21, and I've got it all and I'm looking for that everywhere.

385

00:42:02,190 --> 00:42:11,540

Are you saying I know there's almost no place to me because I'm just allowed to head to training and I've been there?

386

00:42:11,540 --> 00:42:16,200

And my question is, how many miles have you walked in these woods this year?

387

00:42:16,200 --> 00:42:19,890

I walked out with these, walked every inch of the, well, I'm not.

388

00:42:19,890 --> 00:42:25,840

I'm not. I'm I just I get pretty worked out of. Shut up when you're challenging mine.

389

00:42:25,840 --> 00:42:30,240

So I'm going to where I started going on down here in 1971,

390

00:42:30,240 --> 00:42:36,350

when Margaret B go by the steamer carrier and we could walk through those words, which are old orals.

391

00:42:36,350 --> 00:42:41,790

And there weren't many deer anywhere, everywhere.

392

00:42:41,790 --> 00:42:48,450

But from the cemetery up to your comment, you would gut that group.

393

00:42:48,450 --> 00:42:56,580

I can't tell you that in Florida, scare scarce or are we talking about economic stuff that's not used to public use?

394

00:42:56,580 --> 00:43:00,390

And it's not that they used to worry about, except for holidays.

395

00:43:00,390 --> 00:43:10,590

And I know that and you know, folks are looking at me like trying to manage growth for university, which saved my life not very long ago.

396

00:43:10,590 --> 00:43:21,480

But Eubanks had to sell, have such a few million dollars also looked and saw that you got over $50 million in stolen funds available.

397

00:43:21,480 --> 00:43:25,490

Now that number may be wrong, but I love you and I'm not going to talk about that.

398

00:43:25,490 --> 00:43:29,500

I know you're not going to talk about that. You know, you had to sell it before they made it what it was.

399

00:43:29,500 --> 00:43:34,140

You had to go in it and all that crap. It had to do that.

400

00:43:34,140 --> 00:43:41,650

But now you're talking about it and doing that, and I mean, you've got a lot of people out here that are pretty much ticked off about it.

401

00:43:41,650 --> 00:43:48,450

All right. Well, let me, but that just that thing is not that doesn't even matter which I've because that's not often the case.

402

00:43:48,450 --> 00:43:53,960

If you pay 100 percent of the cause, you might get on a beer stand at the edge of the bar you have retire.

403

00:43:53,960 --> 00:44:02,040

Must worry about losing you to your daughter and granddaughter somebody else, and you get to invest blah blah and pops.

404

00:44:02,040 --> 00:44:04,950

It's ridiculous. Well, let me back up on some of that.

405

00:44:04,950 --> 00:44:12,330

Some of the things you just cited are some of the things we're trying to achieve law like like top in the trees where we sell those large oak trees.

406

00:44:12,330 --> 00:44:20,280

We need those some stops and woods that Typekit that that's covered for a while that for for an ephemeral period of time.

407

00:44:20,280 --> 00:44:24,150

The other thing is we are protecting trees that we're leaving out here.

408

00:44:24,150 --> 00:44:28,600

If we drag those large brands through the forest, we're damaging all those trees in the ground.

409

00:44:28,600 --> 00:44:32,210

But again, hardwood management is different than mine.

410

00:44:32,210 --> 00:44:40,200

Well, let me back up on my frickin awesome baseline for these for these forests, but I have to deal with this.

411

00:44:40,200 --> 00:44:48,710

Foresters have been for so much better value in those forests or even a penny.

412

00:44:48,710 --> 00:44:55,230

You can go out there. We say there could be an oak tree in there that is 20 inches in diameter.

413

00:44:55,230 --> 00:44:59,310

There could be another oak tree right next to the 12 inches in diameter,

414

00:44:59,310 --> 00:45:05,910

and there's not 20 years of difference between what we talked about, even at relatively the same age.

415

00:45:05,910 --> 00:45:16,230

Well, I'm looking at. That's where you lost my professional forest and I have to walk through that and I can think of the other side of that is the

416

00:45:16,230 --> 00:45:26,370

shot with method like the effects that represent our one hundred acres at most is really going to cut the forest life here.

417

00:45:26,370 --> 00:45:33,610

Seven thousand. By the time we move through a few of those we cut previously already back up.

418

00:45:33,610 --> 00:45:41,140

And then the other side of that is I come here and I see people hunting the Deer Hunter Rambo shopping with.

419

00:45:41,140 --> 00:45:45,110

We want nuts. It's a deer and there's always a hog.

420

00:45:45,110 --> 00:45:50,530

I talk about that as well. But let me say this. So there is some tradeoffs there.

421

00:45:50,530 --> 00:45:58,000

You're right. It's not that open 100-year-old.

COMMITTEE MEMBER: It’s not accessible

CUNNINGHAM: It's accessible, it's not open, 100-year-old forestland.

422

00:45:58,000 --> 00:46:05,800

We have so much that you're going to start to see in that period because we're not dependent on one of the trees we cut down.

423

00:46:05,800 --> 00:46:13,000

One hundred and thirty years old, oak trees lived to be 200 years old, and a little bit of very few of them make it that.

424

00:46:13,000 --> 00:46:17,200

So we're going to start seeing some of that. I'm going to make.

425

00:46:17,200 --> 00:46:27,370

I'm going to be over, emphasized my point where I know there's the other and I just want my trunk over myself here as well.

426

00:46:27,370 --> 00:46:34,450

One here. But the other thing that I can be talking about has about 4000 oak trees per acre that

427

00:46:34,450 --> 00:46:39,900

are going to replace that over where this mountain range is probably won't be used,

428

00:46:39,900 --> 00:46:46,060

but an understandable state. Why would they not be able to regenerate or you're looking at a deer?

429

00:46:46,060 --> 00:46:50,560

Because that's what we see in the dark.

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00:46:50,560 --> 00:46:55,990

When you when you go through these, we do that final cut.

431

00:46:55,990 --> 00:47:01,060

There's about a 10-year period there. I call it the jungle. And it is understandable.

432

00:47:01,060 --> 00:47:09,080

But that is when you manage these forests to have folks and you have to kind of pay the piper sometimes to get that done.

433

00:47:09,080 --> 00:47:14,740

But when we start talking about and I'm going to talk, I don't like any good incoming sunlight a little.

434

00:47:14,740 --> 00:47:19,810

Let me get to that. Some of this I may answer for you, but maybe you go there.

435

00:47:19,810 --> 00:47:24,370

Let me go through your professional paradox. I want you and I'm not.

436

00:47:24,370 --> 00:47:32,420

I'm not trying to be argumentative with you, either. I just want you to understand what my point is not listening to me.

437

00:47:32,420 --> 00:47:41,020

You know, you walk through there and if it's one hundred. Extra mature, what are you going to call trees in a program?

438

00:47:41,020 --> 00:47:47,600

You are not going back to 65 or 70? Not I don't like that.

439

00:47:47,600 --> 00:47:54,680

I think I think I'm gonna make you happy here. That, you know, we're going to incorporate some of what.

440

00:47:54,680 --> 00:48:00,350

We're going to incorporate some of what you're saying that I typically would not do just a productivity standpoint.

441

00:48:00,350 --> 00:48:07,520

And it's to address some of these things because when we coming up on, you know, this is what we're here for.

442

00:48:07,520 --> 00:48:14,630

You're you're you're passionate about this. Like, I appreciate that and I heard you for years now.

443

00:48:14,630 --> 00:48:21,980

So let me talk about even a few minutes what we say. You know, we're talking about Sam for the so we have zero.

444

00:48:21,980 --> 00:48:31,340

And those first 10 years, I call that the jungle phase and we talk with Sam may go through a period of time where the Swamp Rabbit throws like a lot,

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00:48:31,340 --> 00:48:39,590

but they're pretty good. And once they come out of that, they go into a period of saying great and exclusion.

446

00:48:39,590 --> 00:48:45,740

And that's a period where either the forest is going to sell or we can go in there and do thinning operations.

447

00:48:45,740 --> 00:48:49,370

And so once they stand about 30 years old, it takes about 30 years.

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00:48:49,370 --> 00:48:54,470

We start getting a closer with. So that's part of the answer to your question.

449

00:48:54,470 --> 00:48:58,460

Once they get about 30 years old, we're starting to manage this and we're starting to open them,

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00:48:58,460 --> 00:49:03,710

open back up and manufacture for whatever our objective is at that point in time.

451

00:49:03,710 --> 00:49:08,780

We have a lot of different things we can do, and then we don't have to go in and do really heavy cuts.

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00:49:08,780 --> 00:49:16,160

We can do lighter cuts, we can do cuts that are specifically oriented to the specific wildlife.

453

00:49:16,160 --> 00:49:17,480

It doesn't have to be.

454

00:49:17,480 --> 00:49:26,090

But right now, if we don't regenerate these forests lands, we're not going to have that oak component there 20 years from now, 30 years from now.

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00:49:26,090 --> 00:49:32,640

And we're they're going to be talking about what did they do afterwards? I can tell you that's what's going to happen.

456

00:49:32,640 --> 00:49:40,240

Where we stands right now? They probably start about right there, 70, 80 and then over 100 years old.

457

00:49:40,240 --> 00:49:46,290

They're half here. I’m talking about that overstory there.

458

00:49:46,290 --> 00:49:49,950

There are some big story trees in there, but they’re not oak.

459

00:49:49,950 --> 00:49:58,340

I have some slab I brought from a piece that showed the different canopy layers and how the species composition plays out in these.

460

00:49:58,340 --> 00:50:04,830

And we have found a need to (inaudible) and what prevents it. That's one the reasons you can't just go in and pick up these.

461

00:50:04,830 --> 00:50:10,220

You can't just take it three out here and there it gets back to the sunlight requirements of those stands.

462

00:50:10,220 --> 00:50:18,120

Now I'm going to talk about that a little bit. We are going to start with the terrace position.

463

00:50:18,120 --> 00:50:26,730

These are the positions that do not flood. And this is a photo of our shelterwood area that we were going to visit today.

464

00:50:26,730 --> 00:50:31,410

This is a cherry bark oak right here. They're great. They can be great wildlife.

465

00:50:31,410 --> 00:50:35,940

And now because you tell here, they're all they’re an awesome timber tree as well.

466

00:50:35,940 --> 00:50:39,450

This is what the stand looked like before we did anything very dense canopy.

467

00:50:39,450 --> 00:50:43,830

in here, and we come and do shelter work that we're leaving stands here.

468

00:50:43,830 --> 00:50:52,740

That’s what I want to talk about with Game and Fish. We do not try to employ any kind of set spacing between our tree.

469

00:50:52,740 --> 00:50:56,610

We try to create that variable game with a variable retention.

470

00:50:56,610 --> 00:51:01,740

We try to create that in our harvest so that there is a non-uniform component to this

471

00:51:01,740 --> 00:51:07,980

planet while we're regenerate that it have some value for a lot of these things out here.

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00:51:07,980 --> 00:51:17,070

To be honest with you, the timber value is going to market, and it's really more species composition oriented than it is with the quality of.

473

00:51:17,070 --> 00:51:22,320

There is somebody out there that really reproductive science.

474

00:51:22,320 --> 00:51:30,540

And so our landowners that are interested in temperament, we need to be able to have a demonstration out here that shows them how to do that.

475

00:51:30,540 --> 00:51:38,280

We also need to have an area here for our our wildlife users, but also for people that want to manage well.

476

00:51:38,280 --> 00:51:42,880

It goes back to the first lot of shooting. We're trying to show multiple things.

477

00:51:42,880 --> 00:51:51,300

And so there are some tradeoffs. But again, these fair solutions are not blurred and there's an opportunity.

478

00:51:51,300 --> 00:51:55,620

This is a map that shows here's First Creek in green.

479

00:51:55,620 --> 00:52:01,210

This is a contour line map, and I kind of use it as a heat map showing … here’s Second Creek drive.

480

00:52:01,210 --> 00:52:05,820

These these areas in orange. Those are, that’s the higher ground.

481

00:52:05,820 --> 00:52:10,220

This is where that there's three oh six. This is where that shelter wood picture I just showed you was.

482

00:52:10,220 --> 00:52:14,520

I could show you if there's a little bit of orange. Where you see orange

483

00:52:14,520 --> 00:52:18,330

That's an area that's not going to flood and make it wet, but it's not going to flood.

484

00:52:18,330 --> 00:52:22,230

And so you can pick up those species like coastal if it's on the road quite a bit.

485

00:52:22,230 --> 00:52:27,060

They're not bottomland species, the more open station and some of those occur in those areas.

486

00:52:27,060 --> 00:52:30,930

And that gives us an opportunity to do some different men.

487

00:52:30,930 --> 00:52:35,650

We can incorporate some fire.

488

00:52:35,650 --> 00:52:44,010

We can incorporate some more openness than we can, we can actually remove more trade and create like a very sectional area for some reason.

489

00:52:44,010 --> 00:52:47,530

And to remember, there's 7000 acres of this forest bypass.

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00:52:47,530 --> 00:52:58,000

So if we take 100 acres and put it in an early concessional habitat, it's going to impact small mammals and birds and things like that.

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00:52:58,000 --> 00:53:02,320

There's a component of wildlife hunters and wildlife enthusiasts that are going to like it at work.

492

00:53:02,320 --> 00:53:06,880

It's not all about squirrel hunting. It's not all about fear, not all about us.

493

00:53:06,880 --> 00:53:15,130

We have a lot of people with different reasons for using this, for using this property, so there’s an opportunity here

494

00:53:15,130 --> 00:53:23,380

although it's not necessarily about the bulk of it is going to be an active bottom lands.

495

00:53:23,380 --> 00:53:27,460

This is an area over there off air strip road over there

496

00:53:27,460 --> 00:53:35,690

This is a slough in there. There's a ton of water and willow oak in this sand and the current stand needs in here are

497

00:53:35,690 --> 00:53:44,950

Here are oak regeneration models. But again, we're not talking about doing about making a lot of time talking about 100 acres of it.

498

00:53:44,950 --> 00:53:52,450

And when you put the constraints that I mentioned earlier, it's not even going to be 100 acres in every other year.

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00:53:52,450 --> 00:54:02,800

You just can't come over here and just stop that. That's not going to work. OK, so let's get into some of our stuff.

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00:54:02,800 --> 00:54:08,500

One of the things we've talked about why we might not even incorporate some setting into these areas,

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00:54:08,500 --> 00:54:17,470

and I'm going to show a plan on clear setting in a minute and we're not doing what we're doing when we do a clear make two objects.

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00:54:17,470 --> 00:54:25,120

They're small brand and acreage, you know, maybe 10, 20 or 30 acre, something like that.

503

00:54:25,120 --> 00:54:33,400

And they would be with in our shelter, with harvest. And what the idea would be, there just creates layers of diversity in their habitat.

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00:54:33,400 --> 00:54:39,070

So you have your mature forest, you have that mystery component for generating oak,

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00:54:39,070 --> 00:54:48,430

and then you've got to prove that we're looking at species enrichment plant because some of these, that's what the paper was.

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00:54:48,430 --> 00:54:50,560

I showed you earlier. Some of these stand out here.

507

00:54:50,560 --> 00:54:57,820

They need some planting, they need some species and rich because they're heavy to host open species like that.

508

00:54:57,820 --> 00:55:07,890

They're good, but they're not the best science. So it won't be on a large scale, but there are opportunities to plant wildlife on.

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00:55:07,890 --> 00:55:14,260

That's the other side of it. Many wildlife biologist will tell you that you need that sunlight hitting the ground.

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00:55:14,260 --> 00:55:19,420

You need some of that. You don't need 7000 acres with nothing on the ground.

511

00:55:19,420 --> 00:55:24,790

There have to be some governance, and I'm not a wildlife biologist, so I'll give you the line of here.

512

00:55:24,790 --> 00:55:32,790

But I think if Doug Osborne, Dr. Osborne was here, he would back me up.

513

00:55:32,790 --> 00:55:38,380

And, Rob, if you need to speak up at any point, feel free to interrupt.

514

00:55:38,380 --> 00:55:47,410

Okay. Natural regeneration, the partners, I want to talk about this, this concept of natural regeneration and the shelter with method.

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00:55:47,410 --> 00:55:53,200

We're talking about employing over a period of a whole large scale over a long period.

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00:55:53,200 --> 00:56:00,280

This is some work that went back before me and a lot of it came out of my heart with management over St. Louis,

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00:56:00,280 --> 00:56:05,890

Mississippi, over the last several decades, back in the 70s and 80s.

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00:56:05,890 --> 00:56:12,190

A lot of our hard road managers and landowners started realizing that when their stands for regeneration,

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00:56:12,190 --> 00:56:17,230

they weren't getting old, and that's where the concept of shelter would harvest and failure.

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00:56:17,230 --> 00:56:21,700

It took a lot of research. I did some research projects on time.

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00:56:21,700 --> 00:56:26,230

It's exciting to hear that. And they we're seeing the oaks,

522

00:56:26,230 --> 00:56:32,710

we're not coming back in to do saying they weren't harvested and regenerated in a

523

00:56:32,710 --> 00:56:37,060

specific fashion to create a similar environment that would that would grow more.

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00:56:37,060 --> 00:56:40,240

And that's a really difficult thought. You were going to help solve that.

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00:56:40,240 --> 00:56:44,080

But it took a lot of research and a long period of time to realize that that's

526

00:56:44,080 --> 00:56:49,390

one of the methods we really need to employ when they expand or even a mature.

527

00:56:49,390 --> 00:56:54,490

Not much sunlight getting through canopy. That's the situation, and I'm excited.

528

00:56:54,490 --> 00:57:01,980

There is not one prescription for every hardwood forest or any harvesting you have to take into consideration.

529

00:57:01,980 --> 00:57:09,060

Consideration that current condition of next thing, and so that's when I say these fans are mature over mature,

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00:57:09,060 --> 00:57:13,080

they are even aged, even though they don't look like it because they're different sizes.

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00:57:13,080 --> 00:57:18,900

What happens is when when a hardwood tree loses its competitive position, it loses forever.

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00:57:18,900 --> 00:57:23,460

It doesn't unless something opens up and releases, it doesn't. It doesn't come back.

533

00:57:23,460 --> 00:57:30,090

And that's how you wind up with the variation in sizes of these plants that look and even when they're really not.

534

00:57:30,090 --> 00:57:35,380

And sometimes you have to appeal to the of.

535

00:57:35,380 --> 00:57:38,740

All right. So now we're getting ready to start up again,

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00:57:38,740 --> 00:57:45,790

natural regeneration is saying is derived from the seed seedling seedlings or sprouts from a previous there.

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00:57:45,790 --> 00:57:52,370

So we're creating a material present on that span to regenerate that.

538

00:57:52,370 --> 00:57:56,960

What are the key factors that I need to see thoughts on the U.

539

00:57:56,960 --> 00:58:02,450

S. crop? That's one of the things you always try to make sure. This is one of the biggest factors right here that I talk about.

540

00:58:02,450 --> 00:58:07,680

My horses don't go out there and probably every generation harvest to get natural regeneration.

541

00:58:07,680 --> 00:58:14,690

If you don't have any that because if you once you open that canopy up and you get sunlight on the ground, something's coming back.

542

00:58:14,690 --> 00:58:21,500

These are productive sites and you want it to be your own species that are coming in there along with everything in.

543

00:58:21,500 --> 00:58:27,940

Or more specifically in your bottom line. That's not a big factor, you can't have some fun, fertile soils and places.

544

00:58:27,940 --> 00:58:35,290

But for the most part, Morning Edition this right here is what I spent my entire life working all the time.

545

00:58:35,290 --> 00:58:40,840

Going through a forest like this is to have a environment where you have less than five to 10 percent of

546

00:58:40,840 --> 00:58:46,300

full sunlight hitting the ground and you have oak trees you're trying to regenerate that require 40.

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00:58:46,300 --> 00:58:54,160

They require a minimum of 30 percent of all sunlight if you really need to be up above 40 percent to 50 percent of total sunlight.

548

00:58:54,160 --> 00:59:02,440

On the flipside of that, if I open it, stand up to the point that I'm getting 60, 70, 80 to 100 percent sunlight, then I'm not getting clean.

549

00:59:02,440 --> 00:59:06,580

But you can have too much sunlight and you can have too little sunlight.

550

00:59:06,580 --> 00:59:12,420

And I'm only talking about getting lost. Staffers are. And you think you're going to have more?

551

00:59:12,420 --> 00:59:20,620

So there's a period of time there in these forests like this, and I won't get into the physiological responses where you have to have that

552

00:59:20,620 --> 00:59:26,680

four or five years where you allow that oak regeneration system to develop.

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00:59:26,680 --> 00:59:31,240

And so that's that's really what we're trying to do. We talk about doing a shelf with regeneration,

554

00:59:31,240 --> 00:59:41,680

if not the harvest that we're going to recommend for every harvest and state of Arkansas, because some it doesn't fit with the does.

555

00:59:41,680 --> 00:59:50,620

So what are the components? New Zealand actually here, hear they're living off of the carbohydrates that are in the ocean itself.

556

00:59:50,620 --> 00:59:55,510

They don't even really need sunlight. The first year they'll grow all food store is an apron itself.

557

00:59:55,510 --> 00:59:58,780

And here too, they better have some sunlight or they're going to die.

558

00:59:58,780 --> 01:00:05,380

You can walk through the forest found here in the spring, and you can see a carpet of those out and then you come back here to buy your New York.

559

01:00:05,380 --> 01:00:12,970

We're going to give it. Data shows improvements as we move through false.

560

01:00:12,970 --> 01:00:20,940

Let me ask a question. This advanced reproduction, first of all, let me define it as reproduction, advanced reproduction,

561

01:00:20,940 --> 01:00:26,790

those are ceilings that are present prior to your heart that are of a substantial size to grow.

562

01:00:26,790 --> 01:00:30,660

Once you remove that. So they're there before you ever do anything.

563

01:00:30,660 --> 01:00:34,140

There are some things that sometimes are just hanging over. You're just not.

564

01:00:34,140 --> 01:00:41,880

Some might think that can be. You can have hope sitting in a cardboard box that are this tall and they've been there for two decades.

565

01:00:41,880 --> 01:00:47,940

They keep dying back and sprouting back up there, waiting for that disturbance. They’re a disturbance-based species.

566

01:00:47,940 --> 01:00:55,680

You saw the tornadoes. Terrible thing. Tornadoes played a role in oak regeneration throughout the course of the history of these forest.

567

01:00:55,680 --> 01:00:59,700

There are disturbance species like fire. They like disturbance.

568

01:00:59,700 --> 01:01:04,710

They like flooding it because it cuts back everything else and allows them to take over.

569

01:01:04,710 --> 01:01:09,210

And they're able to do that because they have root stores. They have more food in their roots.

570

01:01:09,210 --> 01:01:15,430

Than say, a sweet gum or a red maple, and some when a disturbance comes through and hurts those other species.

571

01:01:15,430 --> 01:01:25,910

Those competitors, the oaks, are ready to compete. So what is this is this was actually more than that.

572

01:01:25,910 --> 01:01:31,320

This is not, perhaps some perhaps coming off a tree to step down or fail.

573

01:01:31,320 --> 01:01:42,290

And then you get the splinter group. Is this regeneration or this is something?

574

01:01:42,290 --> 01:01:46,610

Just give me a. You got to figure out. It looks like a soap opera, doesn't it?

575

01:01:46,610 --> 01:01:52,720

That's of point one. This was out of my show at Harvard lecture based on the theory.

576

01:01:52,720 --> 01:02:00,670

Same this evening, right here. I follow it from before you ever harvested through the end of the chocolate bar.

577

01:02:00,670 --> 01:02:08,890

It had about three leads on before we started the show, and physiologically, it was totally different than it is right here.

578

01:02:08,890 --> 01:02:16,750

After a season of being on that show, it was able to get some sunlight, get some food reserves, and then it started rolling.

579

01:02:16,750 --> 01:02:27,220

And they explained it look like this. You have to be a b c and a little bit of time to get to this or they're not going to compete if you take a look.

580

01:02:27,220 --> 01:02:31,630

This is what we're at. One of the reasons we can't count on such rapid response.

581

01:02:31,630 --> 01:02:36,480

You can't just go in there. The whole thing and countless were.

582

01:02:36,480 --> 01:02:42,090

The ability of the tree to stump fruit is greatly reduced as they grow in line.

583

01:02:42,090 --> 01:02:47,910

So if you get these older trees like we have here on the and you cut them down, they're not, they don't.

584

01:02:47,910 --> 01:02:52,260

The probability of sprout is really very low.

585

01:02:52,260 --> 01:02:55,960

So how much if we can count on this doesn't have to be to stump for it.

586

01:02:55,960 --> 01:03:00,810

We can't count. It's not going to be there for the most watering a little over a little different.

587

01:03:00,810 --> 01:03:08,190

They will start to grow. And so if you have a pure loaded in there, you can't count on your breath for most of our heroes.

588

01:03:08,190 --> 01:03:13,890

This isn't really about the law. And so that's where we come back to this concept of harvest.

589

01:03:13,890 --> 01:03:18,900

It's how do we get these guys right here and give them that period of time to do this right?

590

01:03:18,900 --> 01:03:23,820

Because that's what we're at. And it took it took a lot more research than just my research.

591

01:03:23,820 --> 01:03:33,780

This is going back decades. Luckily, over the center half of America and really from the U.S. Forest Service also.

592

01:03:33,780 --> 01:03:41,220

So what are some of the parking operations from a historical classical to the cultural destination?

593

01:03:41,220 --> 01:03:48,600

This is that called the publication that Matthew Olson and myself and some others did here on based on the rehabilitation planting we did on the station

594

01:03:48,600 --> 01:03:54,810

and one of the reasons that I don't know for sure what the history saying,

595

01:03:54,810 --> 01:04:03,960

but I'll bet that way back when that's the inevitable part of similar to this life here, where Harvester came in and picked out individual trees.

596

01:04:03,960 --> 01:04:08,910

And if you turn a harvester loose in the forests of the forest, take out a tree here and there,

597

01:04:08,910 --> 01:04:16,050

which one that they're going to take that will go and you get your best or you when you wind up with paper like this.

598

01:04:16,050 --> 01:04:20,550

But. The reason for it is when they removed one tree.

599

01:04:20,550 --> 01:04:29,310

If a storm does it or if a harvester does it does. When you get this little burst of sunlight in there, that's not enough to sustain an oak seedling overtime

600

01:04:29,310 --> 01:04:32,820

They might grow for a little while in there, but over a 10- 15-year period,

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01:04:32,820 --> 01:04:35,810

they're going to follow that and you're going there right after it happened.

602

01:04:35,810 --> 01:04:42,150

Oh we have some oak stands here. Then you come back one back and go, Where'd they do. Those canopy close back up.

603

01:04:42,150 --> 01:04:45,300

And so this single tree selection, it's probably the number one method.

604

01:04:45,300 --> 01:04:53,340

Thats been used all across the south for the last 50 years is the most harmful form of harvesting for hardwood stand that you can have.

605

01:04:53,340 --> 01:05:02,100

And that's more than opinion. That's fact. So for the term regulation, part of this is my understanding.

606

01:05:02,100 --> 01:05:09,570

I don't deal with group selection much. Group selection is an option for where you go in and open up small areas.

607

01:05:09,570 --> 01:05:18,510

It's basically a series of small clear cuts result in not even a forest as you always do a very small window.

608

01:05:18,510 --> 01:05:22,890

It's also very difficult to do here based on our forest insurance.

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01:05:22,890 --> 01:05:26,940

Most harvesters aren't going to want to do that,

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01:05:26,940 --> 01:05:32,750

Some don't get into it today, but you still run into some issues with this.

611

01:05:32,750 --> 01:05:40,580

So that takes us there's really two methods that give us enough sunlight and the problem of clear cut harvesting is it gives us too much sunlight.

612

01:05:40,580 --> 01:05:47,760

So I'm not going in and clear cutting anything either.

613

01:05:47,760 --> 01:05:53,450

And in these forest, I probably would want to do it even then

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01:05:53,450 --> 01:06:01,730

theyre going to be objective driven whether that's creating wildlife

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01:06:01,730 --> 01:06:02,900

This is again,

616

01:06:02,900 --> 01:06:16,880

a pine stand to the effect that harnessing and this we think of 200 acres that we're not going to see that are not going to have all of them.

617

01:06:16,880 --> 01:06:24,410

OK, so that gets us through the shelter with harvest. And you can see in these mature hardwood stance,

618

01:06:24,410 --> 01:06:29,900

you can see the sunlight reaching ground middle of with that, it's just not much sunlight in the ground.

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01:06:29,900 --> 01:06:35,700

And the same thing happens here as we walk out there right now, and it just looks like a bunch of sticks, right?

620

01:06:35,700 --> 01:06:43,410

Maybe I'll leaves are off the trees. plenty of sunlight reaching the ground but the seedlings don't have any leaves

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01:06:43,410 --> 01:06:47,300

And so we need some sunlight on the ground here in the summer.

622

01:06:47,300 --> 01:06:56,360

And so that brings us to the shelter wood harvest, and it's an operation where we go in and it's really hard to modify.

623

01:06:56,360 --> 01:07:01,400

All of these methods really came out of Europe way long ago when forestry was invented

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01:07:01,400 --> 01:07:07,340

And so when you get in these forest bases here like we have in the southern forest you have to understand its system and the trees.

625

01:07:07,340 --> 01:07:15,290

We're trying to grow from a wildlife standpoint or from a timber standpoint and all many places where they diverge.

626

01:07:15,290 --> 01:07:18,950

And I do understand that an amount of understand,

627

01:07:18,950 --> 01:07:28,160

but these are areas that here that classical where you just go and do chop wood and not do anything else really doesn't work well in the south.

628

01:07:28,160 --> 01:07:33,020

And so some of the things we do as we go in and remove some of the not mix the work product art,

629

01:07:33,020 --> 01:07:37,850

and that is one layer of sunlight on some of these things because we might actually

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01:07:37,850 --> 01:07:45,530

incorporate a fire that really helps us get oak regeneration back if we can get fired.

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01:07:45,530 --> 01:07:50,990

But we're not firing for a system here that's going to damage our dreams, trees and you get down.

632

01:07:50,990 --> 01:07:55,290

Think a lot of your points at the back? So we're very aware of that.

633

01:07:55,290 --> 01:08:01,910

But mostly you're going to remove overstory that take two partial harvest to regenerate sand,

634

01:08:01,910 --> 01:08:10,610

and that could be over a period of three years if you get your regeneration by quickly, or it could be over a period of any regeneration, much slower.

635

01:08:10,610 --> 01:08:17,270

And the ultimate goal here is you are going to remove that overstory, at some point time and a lot of reports come back.

636

01:08:17,270 --> 01:08:21,800

But that's one area where after talking with game and fish and I'm after our discussions

637

01:08:21,800 --> 01:08:26,840

we realize there's a need and some assistance out here not to remove that, overstory

638

01:08:26,840 --> 01:08:28,860

And I talked about how we can't have.

639

01:08:28,860 --> 01:08:42,260

It's very it's very difficult to have three agents where you have little small segments of positions in the middle and no trees, no restaurant.

640

01:08:42,260 --> 01:08:45,500

It's very difficult to maintain that it can be done,

641

01:08:45,500 --> 01:08:54,470

but you have to have much more of an open harvesting market available to you to do that because you have to have returned animals on repeated basis.

642

01:08:54,470 --> 01:09:01,850

And then there's still some issues. Right? But one of the things we can do is have a huge forest and you see that a lot.

643

01:09:01,850 --> 01:09:09,690

You're walking to an oak forest understory and there will be that second component coming in there and we can manage leads to eight farms.

644

01:09:09,690 --> 01:09:12,980

And so one of the things that we've talked about doing and make some adjustments and plan,

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01:09:12,980 --> 01:09:17,510

all because historically I would not do that just from a productivity standpoint,

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01:09:17,510 --> 01:09:27,150

but to meet wildlife objectives, to meet needs for specific wildlife species like migratory songbirds that need to fight for habitat.

647

01:09:27,150 --> 01:09:30,720

We can leave that over story on in places. We had 100 acres.

648

01:09:30,720 --> 01:09:40,170

We take some 20 acres or whatever, and we can leave that understory on there and remove the shelf and the trees that go into a new forest.

649

01:09:40,170 --> 01:09:46,380

And we still have a percentage of that forest into a forest, and we can let that grow in that one.

650

01:09:46,380 --> 01:09:52,050

So there are some things that we've addressed and change that we normally do from a productivity

651

01:09:52,050 --> 01:09:59,250

standpoint to make sure we're meeting these wildlife goals.

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01:09:59,250 --> 01:10:04,110

And so I have to have input. That's one of the things that I want from the Fish Commission as we go forward.

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01:10:04,110 --> 01:10:12,660

And for Mark Wallace Collins, you have input and help us what we do in the management operators to make sure we're achieving these things.

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01:10:12,660 --> 01:10:19,430

And I'm not certainly going to be the decision maker on everything out here, but I have a lot of experience in it.

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01:10:19,430 --> 01:10:35,130

So final, I thought. One of the things is I'm pretty open on this very subject, it's highly contentious at meetings all across the Senate,

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01:10:35,130 --> 01:10:41,460

and there are certain pastors and certain wildlife biologist. Get into heated, heated arguments over this very subject line.

657

01:10:41,460 --> 01:10:47,430

But I don't want us to be that way here in Arkansas. I want us to find some middle ground in Arkansas where we can have an oak forest,

658

01:10:47,430 --> 01:10:54,510

that's sustainable. And has good oak components coming back and we can we cannot manage it for health and productivity, but we can.

659

01:10:54,510 --> 01:10:58,650

Also, met our wildlife management management goals. Is There a trade off by everybody to do that?

660

01:10:58,650 --> 01:11:08,450

There is. But I think when you see what Mike has to present in regard to sustainable forestry, how much of the area is going to be impacted at a time?

661

01:11:08,450 --> 01:11:17,550

You know, if you had if you walk in here with the image that were going to cut everything out here, get rid of that image

662

01:11:17,550 --> 01:11:22,680

We've already got quite a few hundred acres over here.

663

01:11:22,680 --> 01:11:28,770

And I was talking to some people they didn't realize when you got 100 acres, over 7000,

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01:11:28,770 --> 01:11:35,470

You don't always see it. My final slide. This leads into what Mike is going to discuss here.

665

01:11:35,470 --> 01:11:40,470

Some of the stuff here is following harvest in hardwood stand

666

01:11:40,470 --> 01:11:48,630

If I go in and clear that and I have slides from our demonstration harvest that year on this station and research projects that illustrate this,

667

01:11:48,630 --> 01:11:52,170

and at the end of Mike's talk, if we can't go through the field

668

01:11:52,170 --> 01:12:02,740

We can walk through some of those images and talk about that. If you go in and open that stand up.

669

01:12:02,740 --> 01:12:11,320

And will play an important operation. You are going from a fast-growing shade intolernat species and things like that.

670

01:12:11,320 --> 01:12:18,580

And you will develop any large mass reproduction. So if you have oak reproduction front, you're good to go with.

671

01:12:18,580 --> 01:12:26,020

You may, may be what you want.

672

01:12:26,020 --> 01:12:30,580

On the other side of that, and sanitary conditions are that we're promoting safe,

673

01:12:30,580 --> 01:12:37,300

tolerant species that really aren't good there for a very narrow group of wildlife,

674

01:12:37,300 --> 01:12:45,220

which is so important with a new group of wildlife and really none of the species that we want to manage, for example.

675

01:12:45,220 --> 01:12:50,290

And so we don't really want to see this build up in the forest. And unfortunately, that's what we're seeing across the South.

676

01:12:50,290 --> 01:12:54,730

And you have small groups that aren't ready to compete if we do have a heart.

677

01:12:54,730 --> 01:12:59,670

So what that chocolate harvest does in the end, the gift was right here for a period of time.

678

01:12:59,670 --> 01:13:09,580

But we have and importantly, the allows us to survive and grow and get to a position where they can grow and establish a new forest.

679

01:13:09,580 --> 01:13:16,180

And that's really our ultimate goal here, because if we're going to meet all of these different objectives,

680

01:13:16,180 --> 01:13:21,200

it starts with, you know, not talking about producing 100 per cent stocking globally.

681

01:13:21,200 --> 01:13:22,790

Number one, you're not going to do that.

682

01:13:22,790 --> 01:13:30,190

We're trying to do is make sure hopes are a significant component of these experiments because everything else is coming back and problems.

683

01:13:30,190 --> 01:13:36,270

We're trying to make sure the hopes are there. And that's really my number one goal.

684

01:13:36,270 --> 01:13:45,090

All right. Any questions, Michael? Oh, I know I went really long,

685

01:13:45,090 --> 01:13:51,600

but I thought it was no question that you don't want to follow up

AUDIENCE: On your bottomland hardwood

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01:13:51,600 --> 01:14:00,030

and hard to for a lot in the last few years about the flooding issues, issue of early June.

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01:14:00,030 --> 01:14:06,510

Have you took consideration about writing about the spring rains in the (inaudible) in the last seven to ten years?

688

01:14:06,510 --> 01:14:13,770

We've been flooded and is been lasting longer into the summer and how that’s affecting the bottomland

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01:14:13,770 --> 01:14:19,650

And what are your what's your opinion on that and what would you do to help it?

690

01:14:19,650 --> 01:14:23,910

CUNNINGHAM: Right now, you're absolutely right. We've had some very wet springs.

691

01:14:23,910 --> 01:14:30,180

One thing is we did not have any GTRs on the station, uh, green tree reservoirs

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01:14:30,180 --> 01:14:33,570

We actually looked at what it would take to do that.

693

01:14:33,570 --> 01:14:43,510

And the more I looked into it and and efficient everybody else, like, I'd stay away from that and we have to be able to help us stay well. And of course we have the beaver helping with that.

694

01:14:43,510 --> 01:14:50,010

And so I guess to your question about it really goes back to the beaver, doing that remediation

695

01:14:50,010 --> 01:14:54,260

of the beaver dams and things like that that allow that water to move out once the rains have stopped

696

01:14:54,260 --> 01:14:57,810

And that is really, really critical.

697

01:14:57,810 --> 01:15:05,460

Obviously, we can't control weather, but I will tell you that most of the hardwood species that we have on the plains healthy,

698

01:15:05,460 --> 01:15:09,870

they can take a little bit of flood, but you don't want it going well into the ground.

699

01:15:09,870 --> 01:15:14,490

So if there's water still on some of these things you didn't want to have sign

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01:15:14,490 --> 01:15:19,760

into July that can see some health issues that you won't necessarily see.

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01:15:19,760 --> 01:15:24,270

mortality from that in one growing season, but that can happen over a period of time.

702

01:15:24,270 --> 01:15:31,800

You can start to see some degradation and mortality in there. And the best thing you can do this type of water, what you want to meet.

703

01:15:31,800 --> 01:15:44,670

And other than that, you know, if we haven't maintained our rivers or streams or the at all, given that control to the hilt, I mean,

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01:15:44,670 --> 01:15:51,390

a lot of that goes to do the broad work in with the people and try to come up with the best

705

01:15:51,390 --> 01:15:58,710

solution where we can bring some of this water and [INAUDIBLE] survive some of this right?

706

01:15:58,710 --> 01:16:00,630

And you're absolutely right.

707

01:16:00,630 --> 01:16:12,300

And as far as doing any type of hydrological type brain changes here, that's not a question for me, but I don't think there's a big is the river.

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01:16:12,300 --> 01:16:19,200

And it's almost like, I think, just getting that natural people and I go back a bit,

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01:16:19,200 --> 01:16:23,610

as you saw, if you came across, that's the frequency will be down below.

710

01:16:23,610 --> 01:16:25,770

It's back in water leaving.

711

01:16:25,770 --> 01:16:34,260

And I'll say this from the oak standpoint, as long as the water comes up and he gets back off and you over the whole ruins.

712

01:16:34,260 --> 01:16:42,690

But some of those others are water. Well, all of those things, they need water come off, some water and.

713

01:16:42,690 --> 01:16:52,530

So, yeah, I mean. So if I ask you the question completely, but as far as altering the hydrology other than the BP control, not really where it may be,

714

01:16:52,530 --> 01:16:59,760

one of the things that stops the flow of water is it moves across the landscape in this part of the woods or fields.

715

01:16:59,760 --> 01:17:05,310

So we could do tons of work on our own land and invest millions of dollars.

716

01:17:05,310 --> 01:17:13,020

But as long as we've got fields all around us that are owned by other people that are altering the natural flow of water across the landscape,

717

01:17:13,020 --> 01:17:19,020

McGOWAN: there's not a whole lot we can do. Our hands are kind of tied. Yeah.

718

01:17:19,020 --> 01:17:23,880

CUNNINGHAM: And what am I talking about? We want we all want to grow food, right?

719

01:17:23,880 --> 01:17:28,330

But we have altered the natural hydrology of the system. No question about it.

720

01:17:28,330 --> 01:17:32,080

And now we have to deal with. Yes, sir.

721

01:17:32,080 --> 01:17:42,730

AUDIENCE: So we talked about speaking about what your administration and your mind or your personal opinion, what are the most valuable species of oak for timber?

722

01:17:42,730 --> 01:17:46,750

OK. Cherrybark Oak? OK.

CUNNINGHAM: If we don't, I'll be honest, we don't have a ton of cherrybark

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01:17:46,750 --> 01:17:49,690

There’s some areas there’s some out here.

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01:17:49,690 --> 01:17:59,380

but we're still more like it makes when you want somebody come forth that makes it a lot easier to talk about, right?

725

01:17:59,380 --> 01:18:03,050

AUDIENCE: A follow up to that … What is the on the upland timber here?

726

01:18:03,050 --> 01:18:08,740

McGOWAN: depends on the market.

727

01:18:08,740 --> 01:18:19,240

You know this map or I don't know right now we're getting forty one dollars a ton for oak saw

logs CUNNINGHAM: and I can tell you this.

728

01:18:19,240 --> 01:18:28,120

So like for those oak saw logs, the sound that I've been here, I don't know what else contract will not do, much like his predecessor or not him.

729

01:18:28,120 --> 01:18:30,460

But I can tell you, when I first got here,

730

01:18:30,460 --> 01:18:38,980

we were seeing like twenty-seven dollars on this kind of low based on our average from all over the state. Our average is

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01:18:38,980 --> 01:18:42,610

about fifty three dollars (inaudible) or something. We don't see that over here.

732

01:18:42,610 --> 01:18:46,600

And it's because of the distance with mills. We'd have a couple of mills here (inaudible)

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01:18:46,600 --> 01:18:49,810

It's a smaller market and you're not going to see those prices over unless

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01:18:49,810 --> 01:18:55,060

you get something … or something you don't have around the of per acre.

735

01:18:55,060 --> 01:19:01,630

If you if you clear cut, is that kind of what you want? I just I would say we would these stands.

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01:19:01,630 --> 01:19:07,390

And again, it is highly variable depending on the species. I would say if you cut everything in their own nature,

737

01:19:07,390 --> 01:19:13,650

that acre would be worth anywhere from a thousand two thousand dollars that would be monitoring a figure about eleven hundred.

738

01:19:13,650 --> 01:19:22,720

Yeah, OK. It just some of these like the area where we're going to go to probably some of the best stations, and it probably pushes more than that.

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01:19:22,720 --> 01:19:28,530

But like, what is the average age at the shelter workforce?

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01:19:28,530 --> 01:19:38,710

Well, if you go back to this slide. When we start talking about implementing shelter wood and hardwood forests we would never do that back in here.

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01:19:38,710 --> 01:19:45,550

That's always going to be out here to stay and maturation. And again, they forced out here, even past what I have on this chart.

742

01:19:45,550 --> 01:19:54,320

The next slide shows the sort of on. So what is the purpose of the hacking forum that is so what's happened is because

743

01:19:54,320 --> 01:19:58,160

of some of the things with the natural flooding regimes not taking place,

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01:19:58,160 --> 01:20:03,410

the lack of fine or far historically before we were here or did creep down into these models or we

745

01:20:03,410 --> 01:20:10,730

had agriculture and and at times and with the natural flooding and then the fire was taken out.

746

01:20:10,730 --> 01:20:14,390

What happened to these forests? And then there also a disturbance makes it so lovely.

747

01:20:14,390 --> 01:20:19,220

As far as like we saw there have been any kind of harvest and a lot of that.

748

01:20:19,220 --> 01:20:23,700

So what happens is you build up the shade tolerant species, but now the maples,

749

01:20:23,700 --> 01:20:29,450

dogwoods, things like that that that really become really, really dense in there.

750

01:20:29,450 --> 01:20:34,200

So even if I remove and I look at this and my project doing some hot work.

751

01:20:34,200 --> 01:20:39,020

But even if you remove a few of those understory trees and leave your sheltered trees,

752

01:20:39,020 --> 01:20:45,620

if that mid-story is still in place, you don't have the sunlight. And so you're saying, I still don't care.

753

01:20:45,620 --> 01:20:49,580

And so what we're doing there, and it's mid-story is coming back.

754

01:20:49,580 --> 01:20:53,960

We're not getting rid of that midstory. We're just controlling the ones that are there at this point.

755

01:20:53,960 --> 01:20:57,380

And we typically go over a certain diameter, say, a minimum of two inches.

756

01:20:57,380 --> 01:21:02,300

So there's still one to two inches out there. And then again, the monarchs are still there.

757

01:21:02,300 --> 01:21:09,230

They're still coming back. But we have to remove a component of that mid story in order to get sunlight environment for it.

758

01:21:09,230 --> 01:21:11,960

And that's where I'll say this isn't for every state this thing.

759

01:21:11,960 --> 01:21:16,740

I work with landowners that don't have allotments, so they don't have to do that operation.

760

01:21:16,740 --> 01:21:21,560

Another solid idea is that landowners that are heavy harvesting occur over a period of time.

761

01:21:21,560 --> 01:21:24,200

They don't need to do the shelter wood harvest they already have.

762

01:21:24,200 --> 01:21:31,010

What they're working on is that that component is occupying the sunlight of available sunlight,

763

01:21:31,010 --> 01:21:35,240

and they're just not the species they're trying to manage. Does that make sense at some point?

764

01:21:35,240 --> 01:21:41,750

So on Nov the 9th or Nov the 10th not sure the deadline of this year, there was a (inaudible) on the station.

765

01:21:41,750 --> 01:21:52,490

Could you tell me what trees were ... there should not have been a hacking saw. We are working on some right now, but not that the property. So the property would have been east of the reservoir?

766

01:21:52,490 --> 01:21:59,390

There was a heavy support there working on it right now. Well that was Nov 9th - 10th.

767

01:21:59,390 --> 01:22:03,470

I guess my question is what's the purpose of that? And what trees are targeted?

768

01:22:03,470 --> 01:22:11,390

Probably because some of the concerns of the indigenous. trees that are targeted are trees that are about the size of my phone.

769

01:22:11,390 --> 01:22:17,080

Those trees are about six inches across. So we're not targeting large indigenous trees?

770

01:22:17,080 --> 01:22:24,880

So when I say this story, those are those are trees that are going to be anywhere from 15 to 30 foot tall.

771

01:22:24,880 --> 01:22:27,310

And they're all and we're all target, always targeting.

772

01:22:27,310 --> 01:22:35,140

You say that we always generically say the rain is between one and six inches and there are not merchant when the harvest and they're not,

773

01:22:35,140 --> 01:22:42,670

we don't inject them. And so but we typically go two inches larger and smaller than there.

774

01:22:42,670 --> 01:22:47,710

And so a small dimers, but the dead trees? That's one of the things I will say historically.

775

01:22:47,710 --> 01:22:52,090

When I did a shelter with throughout my career, I wouldn't necessarily say, Let's leave these trees.

776

01:22:52,090 --> 01:22:53,800

That's one of the things we've written and planning,

777

01:22:53,800 --> 01:22:59,230

and it's just specifically for wildlife management is let's leave these dead trees out here and there's some on the shelter.

778

01:22:59,230 --> 01:23:07,150

We're going to visit visitors. It's right there, but in some other countries, it's useless.

779

01:23:07,150 --> 01:23:12,140

Yeah, but yeah, it's a good red maple and elm with two of the big ones.

780

01:23:12,140 --> 01:23:20,080

The sweetgum is real shade intolerant. So it's typically not theory any plan because you're talking about a tree that growing in the shade.

781

01:23:20,080 --> 01:23:24,820

So you go in that. This is all about sunlight.

782

01:23:24,820 --> 01:23:33,040

Those trees don't. Yes, when I get in my presentation to talk more about the sunlight or sunlight, of course.

783

01:23:33,040 --> 01:23:37,540

And it is very ephemeral. We all that midstory is coming right back, I can promise you.

784

01:23:37,540 --> 01:23:43,030

I had someone asking if I was going to talk about again, I'll refer back there.

785

01:23:43,030 --> 01:23:50,710

We did control about three hundred and fifty mystery trees earlier, and they were all different on the inside.

786

01:23:50,710 --> 01:23:54,520

And I had someone asked me if that was going to happen that night.

787

01:23:54,520 --> 01:24:01,780

So I gave them the nano free regeneration before we ever did anything with running about two thousand savings per acre.

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01:24:01,780 --> 01:24:08,650

And then after we finished everything, there was about four thousand. So you're not getting rid of that component just there.

789

01:24:08,650 --> 01:24:14,080

And that's the problem. What we want to make sure that oak is in there and that's what it's all about.

790

01:24:14,080 --> 01:24:20,170

SHAWN CLARK: All right. Okay. I'm sorry. I don't cut off the discussion and the questions, we’re going to be here as long as we need to.

791

01:24:20,170 --> 01:24:29,440

Anybody to make you stop right now and take a five-minute break.

792

01:24:29,440 --> 01:24:36,970

CUNNINGHAM: Let me explain … when I put these hardwood management workshops and training,

793

01:24:36,970 --> 01:24:42,970

they're usually two days minimum and you’re starting to see why it’s hard for me to tell you everything I’m trying to tell you.

794

01:24:42,970 --> 01:24:48,390

And now we're doing best we can.

795

01:24:48,390 --> 01:24:55,660

Another thing I’m saying,

796

01:24:55,660 --> 01:25:03,070

It's something is everyone comfortable?

797

01:25:03,070 --> 01:25:42,660

OK, well, I'm just going to leave it to me there’s going to be icicles hanging off the ceiling.