

# Throwback Episode: Pinkeye with Dr. Rosslyn Biggs

[Throwback Episode Pinkeye with Dr. Biggs FINAL.mp3](#)

## Transcript

00:00:00 Dana Zook

Welcome back to the Extension Experience podcast. I'm Dana Zook. I have recently gotten several calls regarding pink eye, the causes of pink eye, its management and effect on several cow herds in Western Oklahoma. So I thought it relevant to revisit a really excellent episode that I recorded in 2022 with Doctor Roslyn Biggs about pink eye, so I hope you enjoy this throwback episode. Hope you're doing well this summer and we'll catch you next time.

00:00:34 Dana Zook

Welcome back to the Extension Experience podcast. I'm Dana Zook. I am on the OSU stellar campus at the OSU College of Veterinary Medicine. I'm joined today by Doctor Roslyn Biggs, OHSU extension beef specialist and director of continuing education at the vet school. Roslyn, welcome to the podcast.

00:00:51 Dr. Rosslyn Biggs

Hey, thanks for having me.

00:00:52 Dana Zook

Rosalind, first tell us a little bit about yourself and how you came to LSU.

00:00:56 Dr. Rosslyn Biggs

Oh, sure. Well it. I've kind of returned to OHSU. Is is the way I feel? Umm, I am originally from Chickasha. OK, I was in mixed practice there.

00:01:07 Dr. Rosslyn Biggs

And the reason I say I've returned to OHSU is I graduated high school from Chickasha and then I came to SU, majored in Aggie Con, and then came on to veterinary school as well. And then I went back to Chickasha. I didn't. They tell you like to go make your mistake somewhere else and then come back home? I.

00:01:24 Dr. Rosslyn Biggs

Didn't listen to that very well.

00:01:26 Dr. Rosslyn Biggs

But went to Chickasha, went back home to to practices down there in Chickasha and Burden and was in mixed veterinary practice.

00:01:36 Dr. Rosslyn Biggs

There then worked for the USDA for a little over a decade, doing a variety of of things for APHIS veterinary services, from international export to disease response. Lots of lots of good experiences there, and then almost three years ago, I came back home to OHSU. I had to work for extension.

00:01:56 Dr. Rosslyn Biggs

And the College of veterinary.

00:01:59 Dr. Rosslyn Biggs

It's been three years, almost three years. Yeah. In July, the middle of July, yeah.

00:02:02 Dana Zook

Oh my God.

00:02:04 Dana Zook

Times lies when you're having.

00:02:05 Dr. Rosslyn Biggs

Fun things. So much fun. You're having so much fun, and we made it through a pandemic. So we've we've learned a lot and but still loving the job and trying to get some good work done.

00:02:06 Dana Zook

Yes, and.

00:02:09 Dana Zook

Right.

00:02:13 Dana Zook

Yes.

00:02:18 Dana Zook

That's awesome.

00:02:19 Dana Zook

Roslyn, as we head into the summer months when cattle producers can experience pink eye, give us a brief summary of and we'll go into some of those details. But just.

00:02:29 Dana Zook

A brief, brief summary.

00:02:29 Dr. Rosslyn Biggs

Sure, sure. So we use the we use the term pink eye to be kind of an an all-encompassing catch all term lots of times when we have any cow or calf or stalk or whatnot with an eye issue, OK. And so we want to be we want to be a little careful with that term.

00:02:49 Dr. Rosslyn Biggs

Because it can, there's there's lots of different causes for for eye issue.

00:02:53 Dr. Rosslyn Biggs

Use. But you know our our primary one that we generally focus on when we use the worm pink eye is infectious bovine keratoconjunctivitis. So a really long veterinary term. It's not not necessarily clear, but that infectious part means it's got something that causes infection.

00:03:06

Yes.

00:03:14 Dr. Rosslyn Biggs

Right. So uh generally thought to be more excela. Bovus is a primary agent on that, even though there is some relatively new research that's saying we may have some other components to it and other more excella that's that's contributing to it.

00:03:20 Dana Zook

OK.

00:03:30 Dr. Rosslyn Biggs

But you know, we can have a lot of different precipitating causes that may allow that bacteria to set up. And so we can.

00:03:39 Dr. Rosslyn Biggs

Talk about those.

00:03:39 Dana Zook

A little bit, yeah. Yeah. And so it's a bacteria, right. And you mentioned that.

00:03:42 Dr. Rosslyn Biggs

Generally about generating A bacterial infection now growing up, we use the word pink eye for a lot of different things. It could have been caused by an injury or we are eating some rough hay or in rough pastures where we see things like grass ONS get caught behind.

00:03:44 Dana Zook

We.

00:03:56

OK.

00:04:02 Dr. Rosslyn Biggs

Eyelids, etcetera. Scratches to the eye, things like that that cause eye.

00:04:08 Dr. Rosslyn Biggs

Usually when we use that term, that's that big long term. Again, that infectious bovine keratoconjunctivitis that has an infectious component component to it, yeah.

00:04:18 Dana Zook

OK, OK. So they have to have an injury for it to occur.

00:04:22 Dr. Rosslyn Biggs

Occur. Not necessarily. Not necessarily. You can have some kind of dysfunction or or break in in the eye, usually in the cornea where it it gets set up. Those thin, thin, sensitive, sensitive.

00:04:24 Dana Zook

OK.

00:04:38 Dr. Rosslyn Biggs

Kind of layers. And so we see that the most common first sign we're going to see and actually it can sometimes be.

00:04:47 Dr. Rosslyn Biggs

Largely unnoticed may just be a little bit.

00:04:49 Dr. Rosslyn Biggs

Of tearing of the eye.

00:04:50 Dr. Rosslyn Biggs

Right. And you see that?

00:04:50

I.

00:04:51 Dana Zook

All the time in the summertime.

00:04:52 Dr. Rosslyn Biggs

See it all the time. Especially, you know we are in Oklahoma where the wind comes sweeping down the plains and.

00:04:58 Dana Zook

Yeah.

00:04:59 Dr. Rosslyn Biggs

You know, we have a lot of environmental components that can make can make eyes, water and so we can see some tearing. We then see some inflammation of the tissues around the eye and then as that infection can get set up, if it's truly an infectious process, not a traumatic process.

00:05:17 Dr. Rosslyn Biggs

Or or something like that.

00:05:20 Dr. Rosslyn Biggs

We we see many times the first thing producers may see is some discoloration of that eye, right. It's kind of turning blue or getting a cloudiness to it. And then we can get as far extreme as seeing ulcers or a complete breakdown of the layers of that cornea, which is that top.

00:05:39 Dr. Rosslyn Biggs

Top layer of the eye or outermost layer layers of the eye.

00:05:41

Hmm.

00:05:43 Dr. Rosslyn Biggs

We get breakdown in those cellular layers and those are pretty those are pretty significant and severe.

00:05:49 Dana Zook

So it's gone. It's gone a long ways from there. I mean like to get to that, I remember seeing it almost appears that I has like a.

00:05:51 Dr. Rosslyn Biggs

It's gone.

00:05:55 Dr. Rosslyn Biggs

Point absolutely, absolutely. You can even see on those ulcers it it may look like somebody took a little divot out of the.

00:06:03 Dr. Rosslyn Biggs

Out of that outermost layer of of the eye, usually again, we're going to see tearing, we're going to, we may even see some swell.

00:06:11 Dr. Rosslyn Biggs

We're going to see some redness surrounding that eye or their squinting. They're not. Want to keep that eye eye open and and visual and the the challenging thing with a lot of these two is that it's going to cause a scar on on that cornea. And so it can impair.

00:06:31 Dr. Rosslyn Biggs

Impair vision even.

00:06:35 Dr. Rosslyn Biggs

Life long, or if it gets so severe, it may require removal of that eye. Usually when we're talking about infectious. But on keratoconjunctivitis this is going to be a herd issue, right? So it's not just a single animal in a in a population. We want to see a certain percentage of the animals to use that.

00:06:55 Dr. Rosslyn Biggs

Term that we think it's going to be infectious, of course, it's not just, you know, one cow out of a group of 100, it's it's multiple cows usually in the 10 to 15% of of animals being affected. We do usually see it in the summer and there's contributing factors to that, right.

00:06:57 Dana Zook

MHM.

00:07:11 Dr. Rosslyn Biggs

Like there all we see higher incidence of insect populations, we see our vectors for sure for sure. And it's, you know, that bacteria that can cause an infectious problem has been found on on flies, they can carry it from one animal to to another. And then we have other things in the summer.

00:07:14 Dana Zook

Yeah, like vector some of those.

00:07:17 Dana Zook

Right.

00:07:32 Dr. Rosslyn Biggs

We've we've got the heat, we've got the sun.

00:07:35 Dr. Rosslyn Biggs

Those things we can have dust and wind and all of all of the good things we see, you know, in my favorite place to be, which is other than Stillwater, Western Oklahoma.

00:07:46 Dana Zook

Right, absolutely. So it's anything kind of like, you know, all these things that cause humans to have allergies, they can have cause cattle to have some reactions to that too.

00:07:53 Dr. Rosslyn Biggs

Yeah, we we can see those. We can see those kind of precipitating traumatic type things. And once we break that layer of the eye, then we can see that infection set up and in fairly the the other component to eye injuries, you know I will say this as a veterinarian across multiple species is.

00:08:14 Dr. Rosslyn Biggs

Issues with the eye need to be seen quickly. That is not, that is not something to wait around another 24 to 48 hours and hope it gets better because they can turn worse in in very, very short order and risk losing the the eye, the globe or the eyeball itself. So.

00:08:17 Dana Zook

OK.

00:08:33 Dana Zook

Hmm, that's what I was gonna ask you. So it it progresses very quickly after you've seen if you're hearing.

00:08:34

Yeah.

00:08:36 Dr. Rosslyn Biggs

It can. It can, if you're not. If you're not seeing, seeing treat, you know we're not getting any treatment. I'm taking care of that and. And that's easy to. You know, that's easy to occur, especially if you're.

00:08:49 Dr. Rosslyn Biggs

You know, like my family, where you're sometimes not seeing your animals in the light of day, of course. And so those are things we want to we want to pay attention to some of those early, early signs that may suggest we need to take a closer, closer look at. No pun intended. Yeah.

00:09:04 Dana Zook

Absolutely. We talked about a lot about flies with producers this time of year. So is it just face flies or we talking horn flies and stable flies too? Are there all of them causing the spread?

00:09:15 Dr. Rosslyn Biggs

Or all of anything that's gonna cause that irritation and trauma has the has the potential to to do that. The the other thing we want to be careful about.

00:09:23 Dr. Rosslyn Biggs

That is again as I previously mentioned. What are they eating? How is it you know? Are we gonna have things like I had one producer in in practice that had a had a lot of eye issues?



Well, when we went to investigating it, he was feeding some really rough rough hay and we saw a lot of grass.

00:09:43 Dr. Rosslyn Biggs

On and things behind the third eyelid.

00:09:45 Dr. Rosslyn Biggs

That sits there and then just scratches across the front of that eye and then sets up not only trauma, but gets it set up to go for infection.

00:09:53 Dana Zook

As well, so any round male feeding which is happening right now because of the short grasses and native grasses that gets tall at the end of the year, I think about that you know at the end of the summer and anything like that but.

00:10:05 Dana Zook

Yeah, like the ones of wheat hay, I say. I mean, that's just that's a big deal, especially even mouth issues, right? We sure issues with cows.

00:10:13 Dana Zook

What about breeds of certain cattle? Are they more prone to pink eye than others?

00:10:17 Dr. Rosslyn Biggs

Yeah. Usually our cattle with white faces. So white pigmentation or pink pigmentation around the eyes are traditionally thought of they're going to be more predisposed to to pink eye, but that doesn't mean that.

00:10:33 Dr. Rosslyn Biggs

Black Hided cattle, for instance, are are immune.

00:10:37 Dr. Rosslyn Biggs

We can. We can see it in in all types of cattle.

00:10:40 Dana Zook

And the white coloring is because of the. I mean they they're more effective because of the UV lights, right?

00:10:46 Dr. Rosslyn Biggs

Historically thought of on the the UV UV issues with with light pigmentation.

00:10:49

OK.

00:10:53 Dana Zook

OK. All right. What about immunity? So once an animal has pink eye, we've recovered. Maybe got them to the vet in time, do they have immunity for a little bit of it? I mean I I mean I wonder about that.

00:11:04 Dr. Rosslyn Biggs

One of the thing about Pink Eye is we're still don't know everything about it too. I maybe should have led with.

00:11:10 Dr. Rosslyn Biggs

That.

00:11:10 Dana Zook

No, that's all right.

00:11:11 Dr. Rosslyn Biggs

Comment right?

00:11:12 Dr. Rosslyn Biggs

Umm.

00:11:12 Dr. Rosslyn Biggs

But there's, you know, there's ongoing research. Typically, we don't see pink eye issues in a herd year after year after year. So there can potentially be an immune component to it. I personally am not a huge fan of giving pink eye vaccines, for instance, because they I don't think they're terribly.

00:11:30 Dana Zook

OK, OK.

00:11:33 Dr. Rosslyn Biggs

Effective and and cost effective.

00:11:35 Dr. Rosslyn Biggs

In most instances now, I do think in in the situation where you're having an outbreak of pink guy, that may be something you want to discuss with your veterinarian. Is is that something we want to want to bring on board. But generally vaccinating for for pink eye just to vaccinate for it, not something that's usually on my list. It needs to be.

00:11:56 Dr. Rosslyn Biggs

Individual operation consideration with a historic we we've had problems with it, absolutely.

00:12:00 Dana Zook

You've had problems with it, yeah.

00:12:03 Dana Zook

And I've seen out in the country like certain producers have, like these strange pink eye vaccines. They're kind of like a a certain mix or something that's coming from someone who can't speak the language, but.

00:12:14 Dana Zook

Are those vaccines specific to that area? Maybe.

00:12:17 Dr. Rosslyn Biggs

In a variety of situations, we can have autogenous type vaccines that are kind of customized vaccines to that. The thing we want to be cautious on those is we want to get some diagnostics, veterinary involvement and making sure that we're not wasting our money on.

00:12:21 Dana Zook

OK.

00:12:34 Dr. Rosslyn Biggs

On those kind of vaccines and usually that's going to be in a situation where a producer has had a problem in the past, right and so and that seemed to be effective.

00:12:42 Dana Zook

M.

00:12:45 Dr. Rosslyn Biggs

I want to be cautious of saying pink eye vaccines don't do their job, they need to be used in certain situations. They can. They can make a difference. So.

00:12:52 Dana Zook

Right.

00:12:54 Dana Zook

Well, very well explained. I have always wondered about that because you see a lot of different ones out there. We have this, let's think of this example, we have this producer has is starting to see an outbreak, maybe have some that have gotten severe. What should this producer do? What what should be his or her form of action?

00:13:11 Dana Zook

Action as they.

00:13:12 Dr. Rosslyn Biggs

Move forward. Right. Right. So you know, the the thing we want to do is we want to treat those animals that are affected. We may want to. There's a variety of medication options based on what's going on in that specific eye. And so that may be in the involvement of antibiotics, maybe we may want anti inflammatories.

00:13:33 Dr. Rosslyn Biggs

Lord, because keep in mind anything with the eye is generally very painful too. That's why they squint. That's why they they blink, they're light averse. They don't, you know, they don't like being in that.

00:13:43 Dr. Rosslyn Biggs

They don't get to wear sunglasses, right? And so we we see those those kind of things. So again, antibiotics may be a first choice. We may also again want anti inflammatories, we may want some some coverage of that eye patch is not uncommon that we would we would see those we don't generally like in horses.

00:14:05 Dr. Rosslyn Biggs

With eye issues, we might use a fly mask, right? We don't usually do that in in cattle, but it's the same kind of same kind of effect. And then as we see, you know, if it's a if it's one animal and and out, that's probably some other situation going on, then a highly infectious process. OK.

00:14:09 Dana Zook

Yeah.

00:14:24 Dr. Rosslyn Biggs

They've either had.

00:14:25 Dr. Rosslyn Biggs

At a just a trauma to that eye, we can also have certain types of cancers and things that can go on, and eyes that can have very similar presenting kind of early early signs that we want to take a look at that. But those are our, those are our general general scope of treatment and then we want to step back too and take a look.

00:14:39 Dana Zook

MHM.

00:14:47 Dr. Rosslyn Biggs

Are do we have things going on in that particular pasture in that particular herd that may be putting us at at higher risk? And it's interesting again, I mentioned previously, we don't have all the answers on pink eye, right?

00:15:04 Dr. Rosslyn Biggs

But it seems to be it's, you know, we'll have a problem one year and then next year we don't have anything. We may rock along for a couple of years and.

00:15:13 Dr. Rosslyn Biggs

Then we have.

00:15:14 Dr. Rosslyn Biggs

Another issue so staying on top of it and you know also visiting with your veterinarian because I think we see these trending, this is just anecdotal.

00:15:14 Dana Zook

Right.

00:15:24 Dr. Rosslyn Biggs

But geographically in certain areas and so it's helpful to know if some of your fellow producers are experiencing similar problems. You know what the.

00:15:34 Dr. Rosslyn Biggs

Have been in your veterinarians hands what has been effective approaches to controlling it?

00:15:40 Dana Zook

Yeah, that's that's excellent advice. I think. I think also that it's it should be a veterinarian treated sort of thing that maybe it would probably are not going to solve it on the farmer ranch, if it's if it's an.

00:15:53 Dana Zook

Outbreak type of situation.

00:15:53 Dr. Rosslyn Biggs

Definitely need to have a consultation on on how we want to approach it. Now if we've had a problem in the past, hopefully we already have kind of a.

00:16:02 Dr. Rosslyn Biggs

Treatment plan and and that may be in fact in fact easier but with with our ongoing focus on.

00:16:12 Dr. Rosslyn Biggs

Responsible antibiotic uses right and responsible drug use. Overall, we definitely want to have some discussions happening and not just throw, you know, not just throw a dose of antibiotics out and.

00:16:24 Dr. Rosslyn Biggs

Hope it gets better.

00:16:25 Dana Zook

Right, very good. That was a great summary. Roslyn, thank you so much. Hopefully this episode gives producers an inside look into what causes pink eye and how to treat it potentially, maybe preventing it this.

00:16:36 Dana Zook

Reason listeners if you would like more information about pink eye visit our show notes all the information we discussed today will be there. Alternatively, I'd like to say visiting with your consulting veterinarian is your greatest asset in preventing and treating diseases such as this. We always encourage you to seek out a local vet for this and other common health issues. So thank you for joining us today.

00:16:57 Dana Zook

And have a great week.