

Pond Stocking

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SPEAKERS

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C Christa Hartsook 00:15

Hello, and welcome to the small farms podcast, a production of the small farms program at Iowa State University Extension and Outreach. Our podcast covers the opportunities and challenges associated with rural life.

O Olivia Hanlon 00:29

In this episode, I visit with Tyler Stubbs community fishing biologist with the Iowa Department of Natural Resources and today we are talking about pond stocking. I'm Olivia Hanlon small farms education extension specialist, and we hope you enjoy the show. Tyler, welcome. We're glad to have you joining us today.

T Tyler Stubbs 00:45

Thanks for having me. I really appreciate it.

O Olivia Hanlon 00:48

Tyler, this is your first time on our podcast. So why don't we start with you telling us a little bit about yourself and what your role for the DNR consists of?

T Tyler Stubbs 00:56

Sure, yeah, I've been a fisheries biologist here with the Iowa DNR going on six years now. And prior to that I was a district fisheries biologist in the state of Mississippi for five or six years after I graduated from grad school at Mississippi State in my current role here, I should say I'm an Iowan I'm from Gowrie, Iowa up in Webster County. So my current role here is kind

of a fun one. Really, it's, it's the community fishing biologist. So I cover the state working with communities and cities on fishing opportunities. And so a lot of the times that essentially means working on stormwater retention basins, and kind of manipulating those into into fisheries and so working on ponds is right up my alley. Now most of the time, my ponds that are dealing with are surrounded by homes or corporations or something along those lines, but you know, ponds upon and they still act the same way, they still have the same issues, whether they're on your small acreage, or we're in the middle of a suburb,

O Olivia Hanlon 01:57

For sure, but like we said, we're talking pond stocking today. So let's go ahead and get started here. What are some of the most common reasons that people would think to stock ponds Tyler?

T Tyler Stubbs 02:08

You know, probably the most common reason is, is gonna obviously be to fish. And so you've got somewhere close that you can recreate, whether that's with your, you know, by yourself, with your kids, with your grandkids, family, you've got somewhere that you kind of have control over it a little bit. And you know, you know that it's safe. Some people have ponds just for fish, just because they like the idea of having fish out there. Some will have them more, I would say to watch fish. So especially species like catfish, Koi bluegills goldfish, are all type of species that you can pretty readily see. And those type of species just like if you were to go out to a zoo, or, or a theme park or something that has a pond, you can feed fish, those fish are readily pellets, that it's kind of exciting to watch, they get splashing around, and you can see them up on the surface. And so that's probably another one of the other reasons that's fun to observe. You know, one of the first questions that you're gonna get, if you call a fisheries biologist, and you and I or any other state, and ask them questions about your private pond, it's always gonna be what do you want out of your pond? And from that, what kind of drive what, what the stalking or the management will be after that, but fishing and recreation is definitely probably the main thing. It's a food source as well. So that's something else to think about.

O Olivia Hanlon 03:30

Very good. Tyler, if we're looking at stocking ponds, how big do they need to be before we can consider stocking them? I'm sure this varies based by the fish. Right?

T Tyler Stubbs 03:39

That's a that's a great question. It's a hard question to answer. Because, you know, as far as the management goes, I typically don't work out a whole lot less than probably half an acre. And that's not saying that that's a rule or anything like that, by any means. That's meaning that when you get to that half acre size, you start to get smaller than that you're really working to maybe manage your expectations more than the actual fish population, half acre really limits you size. Small ponds typically aren't it's hard to get the depth on them and the the average depth on them and they tend to sometimes become plagued with vegetation issues. So half

acre is kind of where we've, I don't want to say drawn the line because there's some smaller than half acre ponds that you would see on like the fish local map on our on our website. But half acre you're getting to the point of this is likely not going to be a great fishery, but it will still provide some recreation. You know, ponds are small, I would typically advocate for like one species like a channel catfish, something along those lines in ponds with generally hope to achieve somewhere in that 12 to 15 foot max depth range with an average in that eight to 10 and that's just extremely hard to get when you get down to that size. Like I said, if you're it's all up to what you are looking for What's your objective is for your pond? If it's if it's to grow 10 pound bass and lots of big blue gills, it's likely not going to happen. I'm not saying it couldn't, there's always an exception, but the odds are is that you're going to be very limited on what that pond is going to produce.

O Olivia Hanlon 05:15

Okay, and that makes a lot of sense. So what are some of the most common fish the people stocked ponds with?

T Tyler Stubbs 05:21

Yeah, so one of the most common combinations I guess, I'd say, would be large mouth bass, bluegill and channel catfish. Okay, that is an easy combination. It's kind of a time tested, researched combination, started back, I think Auburn University back in like the 40s looked into some of these combinations on pond management. The bass are your main predator, large mouth bass, I've got a big mouth, they can eat lots of fish, they remain a predator, the bluegill are the prey, and the catfish are really kind of the cleanup crew. You know, they add some benefit, but they also add a lot of recreational benefit is they can grow to large sizes. The largemouth bass and bluegill will readily reproduce without really any issues. Year after year, you can kind of set your watch by it based on water temperature, bluegills are going to reproduce multiple times a year, so it's a good prey species for your bass, it's something that's going to keep continue to produce fish for those bass to eat. channel catfish, that's probably their biggest limitation is like, it's hard to get them to reproduce in ponds. Without suitable habitat. I don't know if you've heard anybody talking about waterfowl on your on your program, but wood ducks kind of a cavity and catfish are the same way. And so a lot of times that habitats just lacking, and so they would be something that you would restock every few years or so. So that's just the easiest combination to do that, once you start adding some additional species to the mix, you're going to start to sacrifice a little bit of growth more than likely on the species that you really want to see. You know, typically Iowa lake on a larger scale, and it'll scale down to ponds too can handle anywhere in that 400-600 pounds of biomass per acre. So you think of it like, like on your small acreage, you've got a pasture, you can only put so many cows on it or so many goats on it before you start running out of resources in limiting what their growth is gonna be. And fish are the same way. The more species you have, the more that biomass is spread out, and it's going to take away from what your, your target likely is. Additionally, some fish just don't do real well. They struggle in that small pond environment. They're not meant to be there. And you know, the simple is always just kind of the best and easiest from the management side of things.

O Olivia Hanlon 07:42

Okay, Tyler, if people do want cat fish in there, is there something that people can do to create that habitat to help them reproduce rather than having to stock more frequently?

T Tyler Stubbs 07:51

Yeah, absolutely. You can add those type of cavity cavity type things into your pond, hollow logs, old concrete, culverts, those types of things. A lot of hatcheries around the country still use like those old metal or cast iron milk jugs when they're spawning fish out, fish out in the hatchery systems. And so all those types of things can help aid that, the more the better. I mean, those cat fish are fairly slow swimmers to start. And so they're pretty easy pickings for the bass when they get going. But but you can get some some natural reproduction going on in those small ponds. It's successful.

O Olivia Hanlon 08:28

Ok, cool. When we're looking, once we've decided that we're going to stock our pond, we've decided what we want to put in it, where can we find the fish to stock our ponds and what kind of programs are out there? What what does that look like?

T Tyler Stubbs 08:40

Yeah, so I guess as far as one question I get fairly common is will the DNR stalk our pond? And the answer to that, you know, if it's a private pond, the answer would be no. However, there are multiple licensed hatcheries around the state who could provide fish for you at a cost. Obviously, we can help you with the rates. You know, if you said I want to start my pond with bass, bluegill, and catfish, here's how big it is, we could say stock this many per acre for each one of these species and you could go to the hatcheries from there. We don't typically, you know make site visits on a lot of private ponds see that you can handle a lot of that over the phone, especially on the stalking side of things. I would always recommend to start a new pond with with fingerling fish from a reputable fish hatchery. It's possible to start upon based on larger fish that maybe you've caught somewhere else. It's possible to do that. But it rarely turns out how you want it to you know, and we and we've messed around with some of that ourselves not necessarily transferred fish around but moving some like some of our broodstock fish from our hatchery system, and sometimes it works out and sometimes it goes haywire really quick, you just it's hard to control what those adult fish are actually going to do in that environment. So it's easy to get a good start fingerling fish, it's gonna take a little longer, you're looking at a couple of years instead of right now to catch fish, but it's going to be the best decision in the long run. Something kind of important along those lines, because people do like to transfer fish from other water bodies, public and private, because if you're transferring fish from one water body, the rest to the next, you know, you're risking quite a bit in introducing things like invasive species, parasites, and poor genetics, especially if you're somebody that's really going to be began to produce in larger fish, you don't want to have those poor genetics come in. But invasive species, probably the biggest one, you don't know what's attached to that fish, or what's in that water, that can really cause you a lot of a headache, and potentially cost you a lot of money to control in the future. It's also important that, you know, while we're on the subject, that you can't move water from one water body to the next, it's illegal. Similar to how you can stock fish in a public water body, that's illegal as

well. So if you are going to move from your neighbor's pond into yours, you can't be transferred that water if you weren't going to do that, you could transfer those fish in things like your own well water, something that you'd place them in your own water, but you're still running the risk that you know, there isn't a leaf attached to a fin or parasite attached to a fin somewhere that you're gonna now end up having to deal with. And so, getting fingerling fish from those reputable hatcheries, they're all listed on our website in the pond management section of our website, there's a listing of them each with their contact information. And you can see call round, see what all they have to offer. A lot of them offer a variety of different species and at different times of the year and so that would be the best way to find one that's that's closest to you.

O Olivia Hanlon 11:36

Okay. And all of that makes a lot of sense on the transferring there Tyler, so that sounds like some potential problems. Flipside, what are the big benefits to stocking ponds? Obviously, we talked a little bit about recreation and things like that. But what other kinds of benefits could we see coming out of stocking our ponds?

T Tyler Stubbs 11:54

Yeah, recreation is a big one. You know, especially if you've got, if you want to improve your fishing, you know, say you you maybe inherit upon a property that you purchased, it's maybe not in great shape, you can biologically manipulate that by you know, if you've got a pond that's full of nothing but bullheads when you get there, you know, stalking predator fish can be a way to help improve not only the fishery, but some of the water quality as well. It's kind of stalking ponds are also kind of an insurance on unwanted species. So if the creek or another pond or whatever, would they happen to run into yours, and you've got an established fish population there, and they've maybe got some unwanted species, that fish population may be able to at least control what gets what gets dumped in there by accident. Insect control is probably another one that I've heard a lot of you I doubt that you're going to notice a huge decline in the mosquito population around you, but bluegills consume an enormous amount of, of insect larvae throughout their lives. And so that's that's also another one to think about. You know, things like plankton, zooplankton, those are all things that are going to be eaten by those fish. And that helps to keep a good healthy balance.

O Olivia Hanlon 13:04

Yeah. Tyler, you mentioned a little bit that cat fish will kind of clean things up, but if people have ponds that could use an improvement in the cleanup area, are there certain species that you would recommend stocking or not stocking that may be popular?

T Tyler Stubbs 13:19

Yeah, probably the most common one that gets brought up is grass carp. Grass carps a pretty tough species, simply because they, in the long run almost always cause more harm than good. They kind of cause you more problems in the end than what maybe what you had not to say

that they're not, you know, a vital management tool on some of those small water bodies. But what typically happens is grass carp are kind of an all or nothing control. There's certain plants they'll eat or certain plants they won't, and you want to, the goal of having those ponds and having a healthy ecosystem in your pond is to have some vegetation in it. You want to be able to control it, but you don't want to eradicate it. And with grass carp you tend to run the risk of eradicating it. And we're in Iowa, we're fertile, we've got good soils, we can grow some vegetation, and those nutrients that are coming off the landscape still have to go somewhere. And if the grass carp is eaten, all those rooted plants, it typically ends up in forms of these large matted algae, like a filamentous algae that you'll see floating around a lot of ponds. And that's not really not something that grass carp like to eat in control. And so, yeah, they helped you on one end, but you still ended up trying to control a different type of vegetation on the other. I think a lot of pond owners get in trouble when they stock grass carp, because they stock way too many because they see, wow, I've got a problem. If I stopped 10 per acre or 20 per acre, I could probably solve this problem pretty quick. And there is some truth to that. But then you've got a very long lived fish. You know, we've seen grass carp up in that 30 year range. They're hard to get a hold of, they're hard to control, they're hard to take out and remove. And so it's just kind of a tough species to deal with. Your, you've really got to have a plan in place on how you're gonna deal with them before you put them in. That's probably the biggest species that typically gets brought up as far as cleaning up vegetation and stuff like that.

O Olivia Hanlon 15:19

Okay, what kind of maintenance are we looking at Tyler, if we do decide to stock our ponds throughout the year?

T Tyler Stubbs 15:25

Yeah, ponds are just like any other piece of equipment, or any other piece of property that you own, that you have to mow or maintain and maintenance is required. Usually it's in the form of vegetation control, which is most likely going to be some sort of herbicide is probably the the best bet is on getting long term control and consistent control. Sometimes it's erosion control, if you get if your farmer acreage has a lot of wind action, you catch a lot of wind, that can be hard on your shorelines and they'll start to erode on you if you don't have any sort of cover around them. Like a native grass plantings are always pretty beneficial to have around the shoreline. Those tall grass prairies just like Andy probably talked about when he was on the podcast, you know, things that geese can't see over they don't typically like. Lose tall grass prairies have a lot of other benefits as well. They soak up the runoff that's coming off the landscape, they hold the shoreline in place, so you're not having eroding shorelines, which the more erosion you see, the more you're catering to shallower water, the more aquatic vegetation you might grow, that you're having to maintain. Trying to manage what is coming into your pond off the landscape and trying to slow that water down, the more you can slow it down, the more things like nutrients and sediment will will deposit before they get to your pond. Probably the biggest thing from the fish side of things, believe it or not, as is keeping fish. If you want to keep a well maintained fish population, you need to have some harvest, and that's probably the hardest thing to do. Because bluegills, like I mentioned earlier, are going to reproduce multiple times throughout the summer. And so there's a lot of fish to try to keep up

with keep those fish maintained at an amount that they're still going to grow at a sufficient pace. And so keeping fish is probably one of the hardest things to get pond owners to do, and to realize that there's a benefit to it.

 Olivia Hanlon 17:23

Okay, very good. If people are looking for any more information on anything that we talked about today, or if they have any questions, where should they look? Or who should they reach out to Tyler?

 Tyler Stubbs 17:32

Yeah, so our website has a ton of information on it, iowadnr.gov, there's lots of information on owning a pond, building a pond, managing a pond, how stalking a pond, you know, one thing you could do is reach out to your local fisheries biologist, we've got offices around the state, all their contact information is on our website, they're familiar with the area, you know, they're gonna know if there's any issues on as far as water quality issues that they're having and other water bodies nearby that can help you out. As I mentioned earlier, we don't typically make on site visits to private ponds. However, you know, we can walk you through a lot of those steps and provide you those resources via the phone or email, we may go out and do a pond visit if we think it's warranted. There's some companies in the state that do pond management. I mentioned the private hatcheries in the state. So all those are are ones that could potentially point you towards a list of those. And, you know, we're we're here to here to help you know, if you have questions, we don't have any problem trying to answer those for you and to get you pointed in the right direction.

 Olivia Hanlon 18:39

Great. Thanks for joining us today, Tyler. Is there anything that we didn't get covered that you'd like to add?

 Tyler Stubbs 18:44

You know, not really just let pond owners know that if you have questions, we're happy to answer them. You know, we're here to help you. We've tried a lot of things in our smaller water bodies that are, would be beneficial to know we've seen a lot of issues, especially on the vegetation side of things that we can help point you in the right direction on how to fix that scenario. And do not underestimate the Iowa DNR website. It's got a ton of information on there that right at your fingertips that can hopefully help you out with managing your your home waterbody.

 Olivia Hanlon 19:15

For sure. Thanks, Tyler. We enjoyed having you on and hopefully we can have you on again in the future.



Tyler Stubbs 19:20

I appreciate it. Thank you very much.



Iowa State University Extension and Outreach 19:22

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