**Nate Hegyi:** Hey, this is Outside/In. I'm Nate Hegyi. Here today with producer Jessica Hunt. Hey, Jessica.

**Jessica Hunt:** Hey, Nate. Let's do this.

**Nate Hegyi:** All right, so today we are talking about a subject we both love, which is dogs and a problem that just about every dog owner has to deal with.

**Jessica Hunt:** So I recently went on a walk with a friend of mine. Her name is Rebecca Perlstein, and she has a dog named Hugo.

**Rebecca Perlstein:** And he's Hugo the beautiful Great Dane. He's a lot of fun, but he's a lot of dog.

**Nate Hegyi:** He's a lot of dog.

**Jessica Hunt:** Yeah.

**Rebecca Perlstein:** Hugo's poops can weigh up to 5 pounds. And that's not an exaggeration. I've had a lot of dogs in my life. I've had big dogs. I've had little dogs. And this dog, they're just immense. There's no words.

**Nate Hegyi:** That's massive. 5 pounds. Oh, my God. This is why I've never wanted a big dog, to be honest with you. It's just like, way too much poop to pick up.

**Jessica Hunt:** When you go. Assumes the position. I'm like, I avert my eyes. I'm like, I don't want to see what happens.

**Nate Hegyi:** Does she pick it up?

**Jessica Hunt:** Well, yes, always when she's with me. So most of the time.

**Rebecca Perlstein:** I choose to triple bag it because it smells so bad. So yeah, I will do that. And then I feel so much guilt because now not only am I using one bag, I'm using three plastic bags that are all going to go into the trash, probably not decaying.

**Nate Hegyi:** That's a lot of plastic bags.

**Jessica Hunt:** Yeah. Yeah. And you know, sometimes, of course, she's just walking in the woods and Hugo does his business off the trail, you know, away from her. And she just leaves it. She just leaves the poop.

**Rebecca Perlstein:** And that makes me feel bad because I care about our planet. I care about our earth. And I'm just, like, contributing to mess. Stinky, poop, mess. I don't know. Does it get warm enough for it to disappear or does it just sit there?

**Nate Hegyi:** Oh, we are going to get emails about this one.

**Jessica Hunt:** Yeah, it's going to be rough.

**Nate Hegyi:** But honestly, like this is such a classic dog owner dilemma. I mean, what should we do with their doo doo today? And outside in we've got another edition of this, that or the other thing. And for this one, first, our apologies because you are going to be hearing a lot of scatological humor because the subject is dog poop.

**Jessica Hunt:** So is it better to leave it on the trail, toss it in the woods or entomb it forever in a plastic bag that's headed for a landfill?

**Rebecca Perlstein:** Jessica, I have a dream that someone will make an invention that will allow hands free sensory carrying when I'm out in the woods. Stay tuned.

**Jessica Hunt:** So now you have three dogs. That's a lot of poop. What do you do?

**Nate Hegyi:** Well, when I'm at home, I bag it in these little compostable green baggies, and then we throw them in the trash. But, Jessica, this is where I'm going to get lambasted in our emails because when the dogs are out hiking, I sometimes let them poop in the woods and I just leave it there because honestly, like, I don't know if it's yellow, let it mellow if it's brown. Also let it mellow. I don't know.

**Jessica Hunt:** So, I mean, I think everybody who's walked their dog has like…kind of flicked it into the woods and said, you know, there. There it goes.

**Nate Hegyi:** Yeah. I mean, it always feels like it’s a justifiable decision, like it's out of people's way. It's it's probably going to dissolve in the rain. I mean, besides Jessica, wolves, coyotes, foxes, they all poop in the woods and we aren't going around bagging that up, right?

**Jessica Hunt:** Yeah, but those animals are all locavores. They eat everything from your neighborhood deer to mice and rabbits, even berries and grasses. Everything that they eat comes from the ecosystem that they exist in.

**Nate Hegyi:** Yeah, it's like. It's like a closed loop system, I guess, right?

**Jessica Hunt:** Yeah. And, you know, black bears out west love eating chokecherries and then their poop helps to spread the seeds it contains. And some undigested nutrients that also help seedlings grow.

**Nate Hegyi:** Like bear.

**Jessica Hunt:** Manure. Yeah. But when it comes to dogs, like, I don't think your dogs are out there hunting deer and grazing on grass. Right. They're probably eating kibble.

**Nate Hegyi:** Specifically Purina Pro for sensitive stomachs. In my case, very expensive.

**Jessica Hunt:** So here's the thing. In a lot of places that kibble diet poo is more likely to disrupt the local ecosystem than it is to help it grow. Like other fertilizers. Dog poop can have a lot of phosphates and nitrogen, as well as harmful bacteria like E coli, salmonella and giardia. And that matters because there are just so many dogs. There are more pet dogs in the US than there are coyotes, wolves and foxes combined. Wow.

**Nate Hegyi:** And more dogs mean more poop, right?

**Jessica Hunt:** Right. It's been estimated that 90 million dogs produce about 11 million tons of dog waste per year. Geez, this is attributed to a pickup company that's called duty calls. And they say if you put that much poop in a line of dump trucks bumper to bumper, it would run from Boston to Seattle.

**Nate Hegyi:** I don't want to I don't want to. Yeah, that's the most disgusting traffic jam ever.

**Jessica Hunt:** So if a lot of that poop is left in backyards or parks or on trails, then big problems.

**Jessica Williams:** So the advantage of having small dogs is that their poops are also small. So to me, I think what's the big deal of just picking it up and carrying it out?

**Jessica Hunt:** That's Jessica Williams. She worked as an environmental scientist and water quality expert for nearly 20 years at Olympic National Park. She's now a consultant and content creator with three dog blogs, including the one about her hikes with her dachshunds. Called You did what with your wiener?

**Nate Hegyi:** What? With your wiener. Oh, my God.

**Jessica Williams:** Gretel is 13 now, so she's kind of been retirement, but they've both hiked up to 15 miles in a day, and they're only 10 pounds, so. With two with two inch legs.

**Jessica Hunt:** Yeah, I was. going to say with little legs.

**Jessica Williams:** So your dog poops on the ground and you're out in nature. And a lot of people think, oh, it's natural, just go away. And that is true. There are microbes in the soil, you know, environmental factors that degrade it, and it would eventually go away and essentially turn to dirt, except some trails, at least around here in Seattle, see literally hundreds of dogs a week. And if hundreds of dogs every weekend pooped on the side of the trail and people left it.

**Jessica Hunt:** Then what happens is when it rains, all that poop along with the bacteria and the other stuff in there, gets washed into local streams and lakes when lakes and ponds are closed because of algae blooms.

**Jessica Williams:** Pet waste and fertilizer and things that contain nitrogen and phosphorus and other things like that do contribute to more growth of bacteria and algae in the water, which then harms the environment, harms it, knocks the stability off of that ecosystem.

**Jessica Hunt:** It's not just algae blooms. Just one single dog poop contains tens of millions of fecal coliform bacteria that can cause intestinal illnesses and kidney problems in people, especially if they're swimming outside after a storm. Oh, my.

**Nate Hegyi:** God. I'm just imagining when I swim in the river in the summertime, I'm just like swimming in dogshit water, most likely. That's disgusting.

**Jessica Hunt:** Yeah. Officials have closed entire beaches in South Carolina because of runoff from dog poop. It's the number one stormwater pollutant in the country, and the EPA has even designated it an environmental hazard.

**Nate Hegyi:** I'm kind of feeling bad about tossing that dog poop in the woods. Yeah. Like, especially in a town like mine that's been really growing over the past few years. We have a guy that walks around town, Jessica, bagging up poop at trails, and then he leaves behind signs calling them piles of shame. I'm feeling like a pile of shame right now.

**Jessica Hunt:** I don't know if shame is really motivating to pick them up, but yeah.

**Nate Hegyi:** Scolding. So we now know that it's not a good idea to just leave the dog poop out on the trail.

**Jessica Hunt:** Number one, stormwater pollutant carries diseases, creates toxic algae blooms.

**Nate Hegyi:** We should definitely pick it up. I should definitely pick it up. I need to be better.

**Jessica Hunt:** But how do you get people to actually do that?

**Forrest Schwartz:** Yeah, everyone's got an opinion because it seems like almost everyone has somehow interacted with dog poop in a way that they would prefer not to.

**Jessica Hunt:** So this is Forrest Schwartz. He's a University of New Hampshire recreation management professor, and he worked on a report conducted by the Leave No Trace Organization for the city of Boulder, Colorado. Now, Boulder is home to tens of thousands of acres of public lands and hundreds of miles of trails.

**Forrest Schwartz:** And what we found was about right around 74% of dog guardians, we'll call them, you know, did the immediate pickup and then took all their bags with them.

**Nate Hegyi:** Dog guardian. That's a term I've never heard before. I like it.

**Jessica Hunt:** So Forrest wants to know what they can do differently to get those numbers up from 74% to 90% compliance.

**Forrest Schwartz:** And so when people perceive the behavior in question as being easy to do, they typically will do it at a pretty high level. In the case of Boulder, you know, a lot of the the folks that we interviewed and talked to suggested that the thing that would increase compliance for them would be things like more bag stations and more dump stations along the trails.

**Nate Hegyi:** Okay. So no rocket science needed here. More access to trash cans means people are more likely to bag and toss their dog poo.

**Jessica Hunt:** Yeah, that's one pretty basic suggestion for how communities can encourage better practices here.

**Nate Hegyi:** But if everybody does it, what about the bags themselves? Like, what is the impact of using all that plastic, not the kind of wasteful.

**Jessica Hunt:** So I tried to find an estimate of how many plastic bags get used for dog do every year. The closest thing I could find was this estimate from a discussion piece in the journal Environmental Pollution.

**Jessica Hunt:** Some researchers looked at the weight of common brands of dog poop bags or dpbs, as they call them.

**Nate Hegyi:** That is one acronym I can actually get behind dpbs.

**Jessica Hunt:** And then they calculated the number of pet dogs worldwide and the number of times they poop.

**Nate Hegyi:** And.

**Jessica Hunt:** They, quote, estimated the number of annual consumed and disposed dpbs at more than 415 billion. Wow. And that they make up 0.6% of total plastic generation worldwide.

**Nate Hegyi:** That is way more dpbs than I would have expected. That's huge.

**Jessica Hunt:** And that's bad for a couple of reasons. First, producing the bags takes fossil fuels, but then they basically entomb the dog poo in a landfill.

**Jessica Williams:** Most of the bags are not going to break down.

**Jessica Hunt:** And the bags that say they're made of biodegradable plastic aren't much better. Here's water quality specialist and dog blogger Jessica Williams again.

**Jessica Williams:** A lot of the biodegradable bags are just plastics that break down into microplastics. They don't go away, melt and go away like some people think.

**Nate Hegyi:** Wait, wait, wait, wait. So. So buy biodegradable bags aren't awesome.

**Jessica Hunt:** Not really. Like Jessica said, they can create microplastics when they break down, but a lot of them won't even get that far because a lot of the so-called biodegradable bags don't actually meet international standards. They're supposed to break down within two years without leaving harmful residues behind. But the FTC has found that a lot of these bags don't. That's especially true if they're thrown in the trash.

**Nate Hegyi:** Jessica, I actually use these little green dog poop bags that are made from biodegradable corn, not plastic corn. Is that okay?

**Jessica Hunt:** Well, they have a similar problem.

**Jessica Williams:** So they will break down, but they have to be in perfect conditions to do that. There has to be light. There has to be heat, has to get to a certain temperature. So even if the bag says compostable or biodegradable and it goes to the landfill, it is not going to do either of those things because they compact it. Dang.

**Jessica Hunt:** So there is one other solution, but it's kind of expensive and it's not available in all towns. There are services that come to your yard and they'll scoop the poop for you and this service will actually compost.It and.

**Stephanie Chow:** And we literally just throw it into our composters. The bags. And they break down beautifully. It takes about two weeks or so for the bags to fully break down.

**Jessica Hunt:** That's Stephanie Chow. She's the founder of Pet Poo Skiddoo in Asheville, North Carolina.

**Speaker5:** Great name.

**Stephanie Chow:** We're a big dog town, too. So years ago and this was before we we increased how much people live here. A lot of people moved here recently with Covid and everything. I was calculating about 6 million pounds of waste just in Asheville City limits. And we cover a lot more than that. That's just within Asheville City. About 6 million pounds of dog poop per year.

**Nate Hegyi:** That's dog town. I need to move to Dog Town.

**Jessica Hunt:** I know. Does it sound awesome? So Pet Poo Skiddoo is a private dog poo composting business. Stephanie picks up dog poo from yards and kennels, but she also has residential buildings and apartments where people dump compostable bags in special pet waste stations that she maintains. But composting dog poop is different than composting food or lawn clippings.

**Stephanie Chow:** And that's mainly because it can absorb a lot of water when we use a lot of straw or pine straw, sawdust, stuff like that, to really get it to dry up because you want to separate it into those little pieces. And the reason for that is because you want airflow to get to everything. And if it's just one, you know, I'm not trying to get too graphic here. If it's just one big mud pile, then air can't penetrate. It can't get through, and it's just going to stay wet and cause everything else to be wet. And it can be really gross. And that's something I've learned over the years with experimenting before I figured out how to do it.

**Nate Hegyi:** That is a really gross image, Jessica. A giant poop mud pile.

**Jessica Hunt:** But unfortunately, it looks like there just aren't a lot of businesses doing commercial composting for dog poop. So this really isn't an option for most people.

**Nate Hegyi:** Not yet anyways.

**Jessica Hunt:** Right. You can compost dog poop at home, but you have to treat it a little differently than you do other compost and it's not fit for your vegetable garden, more for landscaping and whatnot.

**Stephanie Chow:** It does have to be hotter than food waste. Food waste is good around 130°F and pet waste needs to be 150 and to really cook everything off, we also cure it for a lot longer. For safety reasons, we cured it for an entire year.

**Jessica Hunt:** For Stephanie's commercial dog poop pickup service after sitting around under like this carport curing. So there's little runoff and no smell. They give it back to their clients as compost.

**Stephanie Chow:** A lot of people just don't want to think about it, which I understand, you know, a lot. You know, you want to pick the poop out and just throw it away, just not think about it. And and I hope to continue that with people where you don't really have to think about it. I just want you to switch to a composable bag and I want to be able to go collect that poop.

**Nate Hegyi:** Okay. Jessica. So base level back up the poop, preferably with a non plastic bag and commercial composting. If your town has it, that is the best option. Right?

**Jessica Hunt:** I have another option. Oh, you could flush it down the toilet. What? Not the bag, but the EPA actually approves flushing dog poop down the toilet.

**Nate Hegyi:** No, crap. See what I did there.

**Jessica Hunt:** I've been waiting for you to do that, actually. So I did some calling around to see if I could do it in my city.

**Anthony Drouin:** I did have a discussion internally here with us, so I was kind of like one of those questions we don't get often, you know?

**Jessica Hunt:** Yeah, can you believe that? They don't get that question very often.

**Nate Hegyi:** Yeah, no kidding. They don't get it that often. It's kind of gross.

**Jessica Hunt:** So that's Anthony Druin. He's an engineer with the New Hampshire Department of Environmental Services.

**Anthony Drouin:** Each local wastewater plant in the state has its own permit limits, and wastewater plants aren't designed to handle pet waste. They're designed to handle the household. But the the way the chemical loading or the biological loading, they typically do not take into consideration the animal waste. So it's going to be kind of up to each individual plant if they can or cannot.

**Jessica Hunt:** Right. I mean, the EPA says it's okay. Anthony said no, just hold on. You need to communicate with your local wastewater plant or septic hauler because every plant has different expectations for what they'll be processing. And if everyone starts flushing dog poop down the toilet, they'll be dealing with all the same things that we've been talking about more nitrogen or phosphorus, possible pathogens, and they just may not be prepared to deal with it. And if they are, if they are, so to speak, receptive, then that's a town meeting or city council discussion.

**Nate Hegyi:** Would you flush your dog's poop down the toilet, Jessica?

**Jessica Hunt:** Well, yeah. I mean, first of all, I have a small dog. It's relatively compact.

**Nate Hegyi:** If it's a little dog. It would be okay.

**Jessica Hunt:** Well, you have three.

**Nate Hegyi:** Yeah. The ick factor and the just exhausting factor. I want to just train them to sit on the toilet and poop. But they won't do that.

**Jessica Hunt:** It's the future.

**Nate Hegyi:** Okay. So in a minute, we are going to talk more about the big picture, why people don't follow dog laws. But before we do, if you'd like to tell us what you think about all this, send us a message on Instagram or join our private Facebook group. Be nice. But we're also really curious about how folks react to this episode because we are all so defensive of our dogs. All right. Be right back.

**Jessica Hunt:** Welcome back to Outside In. I'm Jessica Hunt talking with host Nate Hegy about dog poop today for another edition of our segment This, That or the Other Thing.

**Nate Hegyi:** But I am still struggling with what the other thing is here like the point of these episodes thus far has been to also step outside of the box and think bigger. And I feel like we haven't gotten there yet.

**Jessica Hunt:** So composting and trash cans aside, I think this may be one issue where our choices as individual dog owners may be the big point.

**Ben Goldfarb:** You know, she's actually she's actually totally silent. And that's kind of the crazy thing about her. Yeah, she she she barks about once a week.

**Jessica Hunt:** So this is Ben Goldfarb. He's an environmental journalist and author, and he actually wrote a book about beavers, which is why his dog is named Kit.

**Nate Hegyi:** Wait, why Kit?

**Jessica Hunt:** A kit is a baby beaver.

**Ben Goldfarb:** She's a weird little mix. She's about 35 pounds. She's incredibly sweet. She's the cuddliest dog in the world.

**Jessica Hunt:** So Ben recently wrote about another environmental dog issue. Okay. Unleashed dogs on beaches.

**Ben Goldfarb:** If we want them to frolic and exercise and be happy, I want that for Kit, our dog. But, you know, in in coastal environments especially, they're really harmful, you know? And the biggest reason for that is that they're just, you know, kind of chronic inveterate harassers of seabirds.

**Nate Hegyi:** Oh, man, the emails we are going to get so many emails.

**Jessica Hunt:** So Ben writes about how dogs can scare away nesting shorebirds and expose their eggs. Obviously, adult birds usually get away, but in one beach in Tasmania, dogs killed 250 penguins in just six different incidents.

**Nate Hegyi:** Oh, wow. That's like a wolf getting into the chicken coop.

**Jessica Hunt:** Exactly. Plus they're top predators. So when dogs are peeing on dead fish or other things that wash up on shore, nocturnal animals are less likely to come around and eat them because, you know, a big predator has come around and basically marked its territory. And even just that spirited running and chasing seagulls is a thing.

**Ben Goldfarb:** Dogs love chasing birds, you know, And it's it's one of those things that looks so innocuous, right? Your dog runs down the beach and, you know, disperses a flock of terns or gulls or red knots or what have you. And, you know, the birds aren't harmed, right? They just all lift up and they, you know, fly 100 yards and they settle back down and it's totally fine, Right? But actually, that repeated disturbance, you know, flushing birds and making them expend energy and calories and stop feeding is really harmful to them. So that, you know, that kind of seemingly innocuous and benign interaction is actually is pretty ecologically damaging.

**Nate Hegyi:** Okay. So how does this circle back to dog poop, though? Like, what are we talking about here?

**Jessica Hunt:** So I think the thing we're getting at is that just like us, our dogs have an impact. And that's why there are laws and regulations around picking up poop and leashing on beaches. Another super sensitive ecosystem here in New Hampshire is on Mount Washington. The Alpine Gardens there are these super rare alpine plants that can be damaged just by walking on them.

**Nate Hegyi:** So do people have to leash up their dogs or something, or.

**Jessica Hunt:** Yeah, they're supposed to all kinds of signs and things saying, you know, leash your dog. But no, I mean, no.

**Nate Hegyi:** Well, that's the, that's the tough thing, right? Like, everybody knows that dog owners just don't always follow these rules and laws.

**Jessica Hunt:** But it's hard to see the impact. It's sort of the absence. It is the absence of of a problem instead of seeing the problem. I mean, do you see it? No. Does that make sense? Am I like talking in circles.

**Nate Hegyi:** No, it does. It does make sense because it's like I have this little dog run in my house that I keep clean, like every single day because I don't want my dog stepping in dog shit. I don't want the back yard to smell like dog poop. Right. You know? But then I'll go out on these trails and I will let my dogs romp wild and free, pooping everywhere. But it just feels like a bigger space. And so I, you know, my it's almost like I feel less responsible if I'm being completely honest, which is not the right way I need to be looking at at when my dogs are out on trails on public lands.

**Ben Goldfarb:** You know, a lot of a lot of the research about dogs on the beach shows that modeling good behavior really does make a difference. Right. If you're out on the beach and every every other person has their dog off leash and, you know, and is off chasing seabirds, you know, you're probably going to assume that that's fine and you're going to let your dog do likewise. If every person has their dog on a leash and is avoiding the seabird colonies, you know, that's probably the social norm that you yourself are going to abide by. Right?

**Jessica Hunt:** Is that too preachy?

**Nate Hegyi:** No, I think that's kind of the kind of where we're landing on this on this piece and with a lot of things that we do in life. Right. Like. It's a gentle nudge just being like, Hey, you know what? You own a little piece of that public land to maybe do your part. Pick up that poop.

**Jessica Hunt:** So as I was doing this, first of all, everyone loved talking about dog poop because everybody cares, because everyone has a dog basically now, or they have cats. And that is another. I could do another whole podcast on cats, cat poop and cat litter.

**Nate Hegyi:** That is a good follow up episode. You shouldn't have me host it though, because I don't really like cats. Again, please send your angry emails and hedgy and nhpr.org.

**Jessica Hunt:** I love the way you're prepared for all the angry emails.

**Nate Hegyi:** Again, let us know what you think about this episode. Our email is outside in at nhpr.org. This episode was recorded and produced by Jessica Hunt. It was mixed by Taylor Quimby. Editing by Me, Nate Hegyi and Taylor Quimby with help from Justine Paradise and Rebecca Lavoie. Our executive producer is Rebecca Lavoie. Music In this episode by Blue Dot Sessions, Spring Gang, El Flaco Collective and Daniel Fridell. Our theme music is by Brakemaster Cylinder. Outside In is a production of New Hampshire Public Radio.