

THE RESEARCHER

VO: This is a podcast about the sea. Because I - Threes Anna - I love that sea. But I am also worried and sometimes even afraid.

What actually happens in, and with, and on, and under that water. Listen.

00:40 A warm welcome to world leading marine ecologist Kees Camphuysen. Biologist Kees Camphuysen, Marine ornithologist, at the Netherlands Institute for Sea Research.

VO: If you ask researcher Kees Camphuysen what his habitat is, he says:

K: Well, I prefer to be at sea.

VO: Kees was just 15 years old when he cycled from Amsterdam to the Hondsbossche Zeewering against a winter storm. School was not interesting. The sea was interesting, and especially what flew just above it. Seabirds. Besides being a marine researcher, Kees is also my husband. And two years ago we went to the island of Foula together. It is the most remote inhabited island in Great Britain, only 28 people live there and an incredible number of seabirds. For Kees, paradise.

Sound of seabirds

01:20 Song SEA

Lecture K: we had not even arrived on the island and then it was already wrong and we were told immediately upon arrival, it is getting completely out of hand.

Whoosh.

VO: this was a fast-forward, to one of the many lectures that Kees gave afterwards, because after the tragedy on the hard-to-reach island, everyone wanted to know what had happened. But to get it clear I have to fast-forward a little less.

Whoosh.

Kees, here's another one!! Oh, you too!! Okay, I'll just stand here for a while, there are just so many, I just see corpses lying everywhere.

VO: no stop, I have to start at the beginning, the day we arrived on the island.

This is the 3rd episode in the series ZEE – the researcher

02:40 VO: Day 1

K+T: It is of course a drama what is going on. 330 dead great hunters.

VO a large brown gull

K+T: ... if those bodies remain there, then the source of bird flu will also remain there, so we have to do something about it. Aren't we just going to clean up the whole island, those birds? You have to do it with as few people as possible, who are well protected and then think about how you are going to do it. Either you are going to burn them in a pile, I don't think that will work. Or you have to dig a hole and throw them in there. Those great hunters are big birds, as big as a seagull, here comes one, here it goes. They are big boys, they weigh one and a half kilos, 2 kilos, so if you have 10 of those things, you are lifting quite a bit, let alone 330!

03:25 VO: yes, that first day on the island, we were overwhelmed by all the carcasses, I didn't want to make recordings of Kees and birds at all. I was here to interview the last inhabitants of this hard-to-reach island. But what happened also had an influence on me, I went to make recordings. Outside in the always venomous wind or while eating at the kitchen table. And later the lectures. And I will now switch between the island, Foula, where the research is taking place.

Whoosh. To a lecture in the future where he will reflect more.

04:00 Lecture K: Yes, indeed, I'm going to talk about a very annoying and especially invisible killer. Bird flu. As an example and as a problem and as a prospect. The island of Foula, that comes from the Norwegian Fogeloi, bird island, it is completely rammed, rammed, rammed, full of seabirds. At least, that was it. Foula Island is a fairly intimidating island. It always rains there, it's foggy. It is always miserable and cold. And bleak, it can be terribly windy. The mountains are very high and those mountains are covered with swamp.

VO: there are no trees, there are 14 houses, no shops and a small road.

K: first let's go to the great skua, they literally breed everywhere on the island. Because it is the largest colony in the world.

VO: and that colony is suddenly sick. And then he does exactly the same as a doctor does in an accident. He goes to work as a scientist and starts investigating what is happening to those birds.

K: Actually the question was what the hell is going on.

05:05 VO: Day 2

T+K: I immediately came across all these large dead hunters. Everywhere? Everywhere! I counted 52, look. Clipped too? All clipped.

VO: to avoid double counting dead birds, he always clips the tips of the wings of each bird.

T+K: I photographed them all. Each bird individually. At one point I disappeared into the swamp so I couldn't do it anymore. It's quite depressing to walk through the terrain.

Music

05:40 VO: it's hard to imagine trudging through swampy hills so I decide to go up with Kees on the third day.

T+K: Look, there's another one. Adult, intact fresh, and dead. It has a large hooked beak, pay special attention to its claws. Bird of prey. It's a gull. ...60 degrees 9 minutes...

VO Just like taking pictures and clipping, he writes down exactly how he finds each bird, and the GPS data.

.... So then we will soon have a map full of red dots. And each red dot is a dead bird.

What is actually the territory of the great skuas, where do they live? Here. Yes, and where else in the world. Almost nowhere. They live on the Scottish islands, Iceland these days, they have gone to Spitsbergen, Norway is a bit. That's it.

06:30 VO: This large dark brown gull, with its black hooked beak and claws, is a scavenger. And belongs to the long-lived birds that can easily live to be 40 years old. Around the age of 10 they finally start laying, but they don't lay many, 2 eggs per year. And all that time they have a permanent partner, are monogamous, and breed in the same place every year. They don't like company because there is easily 30 meters or more between the different nests. And if something comes near that nest, they fly up, make a dive and attack it.

07:10 T+K: here he comes again, zooms, woof! That was scary, damn it, I'm getting out of here, Jesus he really flies right into my face and just goes above me.

How can he die like that, that his head is so far back? I filmed one that was still alive, you see him double over in spasm. They start walking in circles, they lose all ability to move properly, eventually they sit down, but this is the position in which he died, on his back, fallen over, so literally.

Oh fuck another Swampy sound. Number 76. *Clipping sounds.*

Don't touch it with your hands Kees! Don't act up, well, just don't act up, I'm very hygienic, so don't exaggerate. *Spray sound.*

08:30 VO but I am apparently not the only one who is wary of the virus, because we hear via the internet that the British government is immediately banning all bird research on their territory.

Whoosh.

K: Yes, nothing is allowed anymore. Stop everything. And you have to call the helpline if you find more than 5 birds. I have tried to contact the government in all sorts of ways. But if you get something, it is an out of office message. Or no answer at all. So we did not wait for that. Because doing nothing is actually not an issue at all.

Whoosh.

09:00 T+K: Yes bird, was that your husband? Kees walks on, I walk towards him in the meantime, but I see 2 lying there again, both dead, 3 no 4, oh crazy 5, gosh mina, it's unbelievable I see more, I think it's really horrible, horrible, terrible. Then you probably haven't even seen that one yet? I had already seen that one, oh no, god another one! There are just too many. Yes.

Song. Sea are you my friend or enemy

Whoosh.

Lecture Kees: Of course there were risks. What do you have to watch out for? How dangerous is it actually? Can you infect birds? Can you infect areas? What about public health?

VO: then he gets a tip

K: The disinfectants they recommend were of course not available. But with a large bottle of bleach in your hand you can get through the entire country.

VO: and so he disinfected himself with a kind of toilet cleaner that was on the toilet.

10:15 VO: day 4, I see Kees at the only intersection on the island.

K+T: How many have you found now? Total? About 50 more I think. 50 more? It really is a massacre.

Music

VO: and on the fifth day he tells me that he filmed a bird.

K+T: you can just walk up to those kinds of animals, they don't really move anymore, eyes half closed, an occasional movement, sometimes a sound. It is quite nasty. Especially where there is water, that's where the corpses are.

11:00 VO: the sixth day.

K+T: Did you have a good day. Tough day. Tough, I have 125 more dead hunters. What are you saying? 125 more dead hunters.

VO another 125

K: I see a lot of animals that are being taken by surprise. That are apparently healthy, laying eggs for example. And then suddenly the virus strikes and it's over. They fall over. They fall over, try to fly, fall into the water.

VO: and the next day

K+T: Suddenly I'm at 291.

VO And a day later.

A lot? 70 more deaths.

VO And the next day Yes I'm now over 500. Yes no it's going fast.

11:30 VO: every day there are more, but no matter how many emails he writes he can't get in touch with the authorities in Great Britain.

K: And what I find bizarre is that no one really cares about it, and by no one I don't mean people who live in Utrecht like you,

VO Kees has a zoom conversation with his daughter.

But the Spanish flu in 1912 was the same zoonosis. And the funny thing is, we just got through a pandemic, and we didn't learn a damn thing from it, we now have to at least understand how this spreads, how this can spread so quickly. All research here has been flattened. Yeah, yeah. Stop, no more research is allowed. Period. Hey, that's... Well, luckily I don't speak English, so I'll just continue. I'm on the largest colony of the great hunter-gatherer in the world. Do you have the feeling that people don't care, no, people don't care at all about no. We know that these things mutate, and there are viruses lurking in China, we know that too, it's not a question of whether they come, but when they come. And if they do jump to humans, well, watch out.

Whoosh.

16:00 Lecture K: The H5N1 virus originated in China in 1996. In the chicken industry and duck industry. And in 2005 for the first time in wild birds. After this, the bear kingdom was actually loose.

VO: and in no time it spread across Asia and Europe and therefore also the Netherlands.

K: But what changed in 2022. Suddenly it was in seabirds. Suddenly it was in the summer. Suddenly it was in colonies. And it was in the sea.

Song ZEE

VO: research does not only consist of research, it also consists of exchanging, exchanging ideas.

13:00 K: Hey there. M: Hey, how is it there on Foula? K: well, a bit different than I had thought. M: yeah.

VO: So after 4 weeks he calls his friend and colleague, Mardik, who is also a marine biologist.

K: the places where things really go wrong here are at the seaside resorts. There are literally dozens of corpses there. M: so it would have to be highly contagious at short distances VO: Kees increasingly thinks that the infection on the island occurs in the many small pools. K: at first the idea was big hunters, yes scavengers then you get this. M: yes. K: But they don't eat each other at all. M: No. K So it must be, I think it happens in the water. M: yes. Sigh. K: Yes and I understand that a colony in France has also been cleared out by the flu. M: yes and in Zeeland it is now also going wild. K: and the British Isles too. M: Germany too. K: Germany too yes yes. M: Yes, well, that dying will continue for a while I'm afraid. K: I don't know, it seems to be dying out a bit. M: aha. K: the peak seems to have passed. M: okay K: Well I can still watch for 4 weeks. M: ha ha ha yes, you will come home with something, I'll say. But anyway I'd rather have been something else. K: yes definitely. Yes.

Whoosh.

14:00 Lecture K: A rather gloomy picture of a bird colony.

VO: yes, because up until now it has literally only been images, photos and numbers of corpses. But Kees also needs proof.

Lecture K: because in the course of the summer more and more species in Scotland tested positive.

VO: but not on Foula. So he had to...

Lecture K: Try to get those animals tested too. By requesting test kits from England.

VO: but from England it remained quiet.

Lecture K: And just realize for a moment. I found 1500 animals. But every time you walked back the same route, you found new birds. So it really is still an underestimation. It also indicated that almost

all the birds on the island died. VO: that death, that constant death has a great impact on us and after a month among all those carcasses he still has no answer from the government.

15:00 K+T: This is the biggest blow to adult long-lived seabirds ever due to a pandemic. Those are really huge blows. Why aren't we investigating that? You should investigate that.

VO: and then suddenly. *Pliebje*. Finally an answer. He gets the official protocol sent to him.

K+T: If you're going to clear out. I'm not even thinking about clearing out. I can't handle it at all. Do you know how much 600 great skuas weigh? Or 700 great skuas. And how am I supposed to dress for that? Category 1 chemical waste. Do I have to go up into the mountains in a plastic suit? Well then you'll come up nicely, I can assure you. Office clerk reactions are that. We have guidelines here and we'll share them with you, fuck off with your guidelines. Come and see what's going on here. Then set priorities, then say what is and isn't allowed, but not from your desk.

Whoosh.

12:40 Lecture K: anyway. My research consisted mainly of counting corpses and counting corpses and photographing corpses.

VO: always at the place where they die. Because ...

K: Where did it go wrong, where does it happen?

VO: that was the question that kept racing through his head.

16:30 K+online meeting: Kees!

VO: and then he finally has his online bird flu meeting.

K: Well long story short, I'm now surveying this tiny island,

VO and he says that he thinks the spread is happening in the places where they bathe.

K: These are very clean birds. They wash themselves every day. That's where they have close contact.

So, my big suspicion is that is the point where they get the virus.

VO. And then comes the question that you could have been waiting for.

Are you working together...

VO: Do you work together with local virologists? But the answer is.

K: No ...

Ron, you have your hand up.

I don't think it would be hard to find...

VO: one of the virologists offers to use his network to help Kees.

... you're probably talking to the wrong people. If you have an address. I'll send an email to 2 people, and put you in the cc Kees.

Lovely thank you.

Okay then the next point on the agenda is.

Whoosh

17:45 lecture K: normally virologists and bird researchers rarely talk to each other, we find each other a bit strange, but now it is absolutely necessary that we do because we need all those different expertises to even understand what is going on.

Beep

VO: within a day he has an answer from the British virologists. They have no budget to help him. So he can only do one thing. Contact Bob Furness.

K: That is the professor who has worked on great hunters here for years, the authority for seabirds in Scotland, just wrote to me: I called Defra today.

VO that is the food and commodity authorities.

To ask for some samples from Foula to be analyzed.

VO: but the answer is

K: no

VO: we know.

K: So now we have put pressure on from two sides, from Erasmus University. The answer was we are not getting any money. And now the government has been addressed, directly. And they say now the virologists know. So scientifically speaking we do not have bird flu here.

18:40 VO no officially proven bird flu on the island means that everything Kees investigates will soon have no meaning, no value.

K: Here's another nest

VO beginning of the 7th week

Tonight champagne, the thousandth. Oh look, oh yes yes, Clip two wings. Spray.

19:10 VO: and that same evening we hear that the virus has reached North America.

K: Catastrophic Avian flu devastates endanger stern colony in.

Bird flu is killing hundreds and hundreds of birds.

K: Yes that's the astonishing thing it's going so fast to both sides of the Atlantic and also further. Now it's a virus that is relatively harmless to us. But just imagine what happens if these guys fly something back and forth that kills us. Of course we all think we're indestructible. These birds think so too, they even lay eggs.

Music

K+T: how many did you find today? 32 – 34 - 35!

20:00 VO: everything in this tiny spot in the middle of the Atlantic Ocean is numbers. Because we are also counting the days, after 7.5 weeks our stay on the island is almost over.

Beep

K: I get a message from Nature Scott, I will send you 6 swap tubes, to take 6 samples from 3 birds.

VO: they are going to send 3 tests

K+T: Are you happy now? Well, happy? It's time. It's a bit late, luckily there are still sick birds.

20:40 VO But when I ask him the next day; how many did you have? He says for the first time.

K: only one.

VO: except dying, nothing on the island happens automatically. The wind that always blows here has become a storm, so the mail boat doesn't sail and going outside is almost impossible. But then, just before our planned departure, there is a gap in the wind and the mail boat sails over once with a package for Kees.

21:10 K+T: What are they sending now. Oh, it looks like some kind of covid package. Okay! This is the bio-box, the biological safe box, or something like that. I want to keep this thing clean, this is where it's going to be transported. These are 6 tubes, this is a tube. 1 bird gets 2 swaps, one for its beak and one for its cloaca. There's a cotton swab in there. So if you're the only one who touches this. Then only you touch the cotton swab and I don't. Then that's also relatively clean, there are 2 per bird. I have Ziplock bags for that. What kind of bag? A zip lock bag, oh, a bag with a zipper. Yes, yes, yes. After that you throw the whole lot in there and then it's safe to handle. And we wear gloves and clothes that we can wash completely afterwards and face masks. Clear! That's all.

22:15 Lecture K: But we got three test kits. And went to body number 999, 1040 and 1044. To stick a cotton swab in them. And then we actually got the proof. Cough Yep. Bird flu, and the rest is history.

Music

22:30 VO: science is data and figures. The official world census list states that three great skuas died of bird flu on Foula.

Never before have I experienced the extinction of a species so consciously, because it is clear that the great skua has almost disappeared on the island. There are still a few, but to really come back it takes 70 years under good conditions and there are fewer and fewer of them. After that summer in 2022 when we accidentally were at the outbreak on the hotspot Foula, the H5N1 virus spread among seabirds all over the world in the following year and a half. At the beginning of 2024 it arrived last in Antarctica.

In addition, 40 different mammal species have been infected in recent years. Including pigs, dogs, cats and dairy cows. And of course humans too. At the time of writing, there are 907 people who have been infected, half of them have died.

Worldwide research, including that of Kees, has now shown that the virus spreads by eating infected carcasses and by droppings on the ground and in water. A researcher in Alaska has shown that the virus can survive for more than a year in open water.

This bird flu virus can no longer be eradicated. And it is certain that pandemics will occur in the future, but where, when and how is difficult to predict.

In the show notes I will put links to sites with more information. I will also give a link to the podcast EEN LEEG EILAND (an empty island) that I made for DOCS about the inhabitants of Foula.

The researcher is the third episode in the series sea. Every two months I try to make a new one. If you want to hear them, subscribe, they will automatically appear in your podcast app. You can also follow me on Instagram. All credits and more information can be found in the show notes. And if you liked the story, please pass it on. Thank you for listening.