[00:00:00] Tamsin: Did you enjoy history at school?

[00:00:07] **Swathi:** Well, I wouldn't say it was my favourite subject. For me, it was kind of difficult to remember the dates and, you know, how to relate to them.

[00:00:13] **Tamsin:** Yeah, I feel you. Well, imagine if you could study history by actually uncovering and studying physical remnants of the past - maybe even objects that were used by people who used to live thousands of years ago.

[00:00:25] Swathi: That sounds interesting.

[00:00:27] Tamsin: I'm Tamsin.

[00:00:28] Swathi: And I'm Swati.

[00:00:29] **Tamsin:** And in this episode of Beyond Boundaries, we're hearing how archaeologists here at Aberdeen are doing just that.

[00:00:35] **Professor Gordon Noble:** My name is Gordon Noble, I'm Professor of Archaeology at the University of Aberdeen.

[00:00:39] **Tamsin:** I sat down with Gordon to hear how archaeology brings history to life.

[00:00:43] So to go back to absolute basics, what is archaeology? Because in my head you're just digging in a field to find bones, but it seems to be a lot more than that.

[00:00:51] **Professor Gordon Noble:** Oh yeah, absolutely. It's an amazingly diverse subject that really spans the humanities to the sciences. So some of my colleagues are working on things like ancient [00:01:00] DNA, isotopes, you know, looking at what people ate and how they moved around in the past.

[00:01:06] But we also have scholars who are looking at things like, you know, Viking cosmology, traditional life ways in North America, uh, Inuit culture, or here in Scotland, we're doing lots of work on field excavation, which is a more kind of traditional view of archaeology, which is digging in the ground, uncovering the material remains of past cultures. [00:01:30] **Tamsin:** So Gordon, you're just back from a dig, I hear, and I've seen about it all in the news. Tell us about it.

[00:01:34] **Professor Gordon Noble:** Sure. So we've been digging at Burghead, which is up on the Moray coast, and we've been sponsored by Historic Environment Scotland to undertake a series of excavations on this amazing Pictish fort that we've known about at Burghead for centuries, but part of it is falling into the sea.

[00:01:54] So it's a issue with coastal erosion and rising sea levels, which is a bigger and bigger issue [00:02:00] with climate change. And so we are undertaking rescue excavations with our students and with community volunteers to investigate this early medieval fort. So yeah, our big project just now is the Northern Picts project, looking at Burghead and other sites, and really kind of uncovering this really mysterious time period where we have very few historical records and traditionally quite, quite few archaeological sites, but this kind of sustained program over the last 10 years or so with the Northern Picts project has uncovered some fantastic settlements and remains of this early medieval time period.

[00:02:39] Tamsin: Who are the Picts and when were they around?

[00:02:42] **Professor Gordon Noble:** So this is something that really excites me about what I do. You know, my, my children get taught about, you know, the Vikings and the Romans and the Egyptians, but very rarely about the Picts. And so the Picts are [00:03:00] people who lived in late Roman time period and post-Roman period.

[00:03:04] And they go on to become this powerful series of kingdoms who are contemporary with the Anglo-Saxons and early Irish societies uh in, in Britain and Ireland. And they're first mentioned in these Roman sources as these troublesome groups who are causing trouble north of the Roman frontier, which is at Hadrian's Wall at that time period.

[00:03:25] Um, and they raid Roman Britain and they go on, as I say, in this post-Roman period to become this powerful series of kingdoms that rule from kind of present-day Fife, kind of central Scotland, up to the Northern Isles and across to the Western Isles. And they've left behind this amazing legacy of carved stone monuments, which is one of the real attractions to studying the Picts.

[00:03:47] They have these, almost a kind of like hieroglyphic style, uh, way of, of writing things down, probably names, we think, um, using abstract symbols and animal symbols and the [00:04:00] like. Absolutely beautiful traditions of, of stone carving. Um, and that's pretty much, you know, one of the few things we knew about the Picts, was they had this amazing carved stone tradition, but understanding the context of the stones and uncovering the settlements and the like has taken a long time.

[00:04:17] But as I say, we made big progress over the last 10 years and covering settlements with hundreds of dwellings within, being able to date that symbol system back to the late Roman period, we think, and really putting context to those amazing artistic traditions that the Picts are really famous for.

[00:04:36] **Swathi:** That's really interesting. I certainly didn't learn about the Picts in my history class.

[00:04:42] **Tamsin:** And even though I grew up in Scotland, I didn't learn much about them either. So the work Gordon and his colleagues are doing is really exciting.

[00:04:49] So what did you find there? What's under the earth?

[00:04:52] **Professor Gordon Noble:** Well, it's amazing what's, what's directly under your feet.

[00:04:55] So today it's in the modern town of Burghead, uh, but right at the end of [00:05:00] the promontory in which the fort sits, um, is the remains of the early medieval fort. And so you can see the humps and bumps of where the walls, where the fort was, enclosing the site. And on the seaward end, that's where part of the fort is beginning to erode into the sea there.

[00:05:18] So we've been investigating the, the rampart, the wall of the fort over the last few years, and that's really impressively preserved. So it stands up to three-and-a-half meters high. Um, was probably at least six or seven meters wide and could have been originally, you know, six meters or so high. So really impressive fortification.

[00:05:41] And so we're uncovering the rampart there and then we're excavating in the interior and we're finding buildings and structures of the Pictish period from about the 7th century AD through to the 9th century AD. So that's a really exciting opportunity for uh, our staff and for our students and for the [00:06:00]

volunteers to get their hands on early medieval archaeology and really uncover some of the great things about our shared past.

[00:06:14] **Tamsin:** So how did you get into this? Did you have a background in history, or just an interest? How did this all come about for you?

[00:06:21] **Professor Gordon Noble:** I very much fell into it. I'm from northeast Scotland originally. We didn't get taught about the Picts in school, so I'd never heard of the Picts until I went to university at Aberdeen and I initially started off studying English.

[00:06:34] But we do a broad spectrum in Aberdeen, so you'll do at least four subjects in your first year. So I chose History of Art as one of my subjects, and I loved that, so I switched into History of Art. And we did this course in third year, which was about early medieval art and sculpture. So from a History of Art perspective, taught by my, my great lecturer, Jane Geddes, and she introduced us to the Picts and their [00:07:00] art.

[00:07:00] And we visited sites like Burghead during my undergrad, and I was like, wow, this is amazing. But I didn't really have a sense of, what you could do in terms of archaeology at that point. Anyway, I started digging in my spare time and I went to do a master's in archaeology after my undergrad, and then did a PhD and then got a job in Aberdeen when they were setting up a new archaeology department round about 2007, 2008.

[00:07:27] And it seemed just sensible to start investigating the sites on our doorstep. And so I just started doing some Pictish archaeology as a kind of sideline, because I'd been doing more prehistoric stuff before then. And then we found this amazing stuff at a site called Rhynie, which is just 40 miles west of Aberdeen, where we were finding wine amphora coming from the Mediterranean to Aberdeenshire in the 5th and 6th centuries, glass from Western France and really realising that the Picts were this really wellconnected society. They weren't [00:08:00] these, you know, kind of barbarians, as the Romans might have seen them. So yeah, it was really exciting and, you know, I haven't really looked back since then, and more or less all our projects recently has been on this medieval, Pictish time period.

[00:08:13] **Tamsin:** So what would you say are some of your best finds so far in your career?

[00:08:18] **Professor Gordon Noble:** Um, well, I mean, we've found some amazing things, which people would, I guess, class as "treasure" in inverted

commas. One of our early projects, uh, working down at Forteviot, we uncovered a, a Bronze Age kist and inside it had two bronze daggers, one with a gold hilt band and the tooth of a sperm whale being used as the pommel.

[00:08:42] But next to it, not in terms of a traditional treasure, uh, was, uh, flowers that had been placed there 4,000 years ago, meadowsweet flower heads that had been preserved by the toxicity of, of the copper in the bronze daggers. So it was just amazing insights like that. But I think in terms of [00:09:00] what really drives me is not, uh, so much the finds, but it's always nice to find objects from the past, but it's actually uncovering the life ways of people in the past, so uncovering buildings, fortifications, structures, and piecing together how people lived in the past and how sites functioned.

[00:09:19] So for me, that's as exciting as finding objects from the past, is really understanding the kind of architectures of everyday life, really. And that's what archaeology is amazing to tell us. So, you know, our histories that are written down are generally from an elite or from, you know, a particular viewpoint.

[00:09:37] What we're finding is the material remains of more everyday life, which I think is really exciting and tells a completely different story at times. I think that is the beauty of archaeology, is that it can uncover evidence that simply wasn't written down and uncover completely different narratives about the broad, grand narratives of [00:10:00] history, but also just on a very local level, how people are actually living and the like.

[00:10:04] **Tamsin:** So it's telling the story of the past without it being glorified in certain ways.

[00:10:08] **Professor Gordon Noble:** Yeah, absolutely. You know, I think that old adage of, you know, history being written down by the victors is true to an extent. Um, and it's often, you know, doesn't record certain voices. So for the Pictish period, for example, our first mentions of the Picts are by the Romans who talk about these, presumably these tattooed people, the Picts means "painted people".

[00:10:30] What we don't have is the voice of the Picts themselves. Only through archaeology can we begin to tell those stories of the people who lived locally in what we now call Scotland, who didn't have a voice and didn't record things in written documents. So it's really, again, archaeology that brings us those stories.

[00:10:55] Tamsin: And I was even lucky enough to see up close some of the Pictish artefacts that they found on the [00:11:00] dig.

[00:11:00] So you've brought some things with you today. What did you bring along?

[00:11:03] **Professor Gordon Noble:** So yeah, these are finds from Burghead. And so we have uncovered lots, lots of finds from the site, and that's quite unusual in itself, you know, a lot of sites in Scotland, uh, we have acidic soils, so bone doesn't survive, and we don't get a lot of artefacts because of plough truncation from later agriculture and the like.

[00:11:24] But Burghead, it's got this amazing, kind of, microcosm of survival of, of objects. So it's basically, it's like a sand dune site. So there's lots of sand blew over the early deposits, um, covering over all these, uh, buildings and animal remains from the food they were eating. And we find objects within those buildings and the like that they've left behind.

[00:11:50] Often the things that they've thrown away, because that's what archaeologists find, is the, you know, the everyday bits and pieces that people have left behind. So [00:12:00] these are just little fragments, but they give you amazing clues about the kind of connections of the people at Burghead. So we found items of personal adornment, so things like bits of brooches.

[00:12:15] This year we, we found a whole series of bronze or copper alloy rings. So here is one that's still within its soil. We haven't fully excavated this yet. So this will be in, for the lab to be micro x-rayed. So we've got a tiny block of soil and on it we have a little bronze finger ring here. Just very modern looking, but this is from early medieval deposits.

[00:12:41] **Tamsin:** You say early medieval. What kind of dates are we thinking for that?

[00:12:45] **Professor Gordon Noble:** Yeah, I mean, in general, the early medieval is often seen as the kind of post-Roman century. So about 400 AD through to maybe 1100 AD but Burghead itself seems to have been built around [00:13:00] about the 7th century and goes through to the late 9th century. So in the kind of Viking age.

[00:13:06] **Tamsin:** So all these things in front of you are thousands of years old.

[00:13:08] **Professor Gordon Noble:** Yeah, yeah, exactly. So we've got things like bone pins, which again, you know, in terms of survival is really, really unusual. It's a piece of animal bone, but they've shaped it into a beautiful little bone needle here, or a bone pin.

[00:13:24] And these are for things like fastening clothing, fastening your cloaks, um, and also sometimes hairpins as well, we think. So these are amazing to survive at all. So we've got a few of these from the Northern Isles where you get less acidic soils. But to find them in Burghead is, is really exciting. And then there's little bone objects.

[00:13:48] Uh, this might be some sort of object for maybe making nets or basketry or something like this. You can see there's pierced holes on the end, end of this object here. Again, this is pretty...

[00:13:59] Tamsin: Is [00:14:00] it made from bone, do you think?

[00:14:01] **Professor Gordon Noble:** Made from bone, made from animal bone.

[00:14:03] **Tamsin:** So it kind of looks like a really flat spare rib, but with a couple of holes at the top.

[00:14:08] **Professor Gordon Noble:** Yeah, so yeah, they're just using what's around them to make a whole series of objects. And then we've got a tiny fragment, which doesn't look like very much, but it's a tiny fragment of glass. And glass is fairly unusual in this time period. And you can maybe just see there's little trails within the glass there.

[00:14:30] And this is from an early medieval glass vessel and it might be imported from Anglo-Saxon England. Uh, so it tells you about the connections of the Picts and the long-distance connections. So that's, that's really exciting. And on those long-distance connections, probably our star find from this year, one of them, was a coin from the Northumbrian kingdom.

[00:14:55] It's a little styca, so a silver penny. We've had our [00:15:00] coin experts look at it, and it's a coin of Athelred II, who was a ruler in the mid-9th century, 841 to 850. Uh, so that's an amazing marker of the time period that the site was in operation. And so, yeah, we were wondering, how did these coins get to, to Burghead?

[00:15:22] You know, are they some sort of diplomatic gift? So, yeah, it suggests, again, that the Picts have got these long distance connections and the, you know, they're very able to access some of the trade networks and social networks across the kingdoms of Britain and Ireland in this 9th century context. So, yeah, that was an exciting find.

[00:15:42] Tamsin: It's all incredible how old it is.

[00:15:47] For archeology then, do you have to have a base interest in something, since yours started in History of Art?

[00:15:54] **Professor Gordon Noble:** I think most archeologists specialise, and this is what I specialise in this, the medieval period. I'm not an expert on [00:16:00] finds. I was, say I'm a more of a field archeologist, so fairly traditional archeology.

[00:16:07] So it's good to develop a specialty. That's the amazing thing about our department, is that we have people who work on a whole host of different things with different approaches. I'm probably in the minority these days in terms of being a field archaeologist. A lot of my colleagues are looking at animal isotopes in the last Ice Age, the Upper Palaeolithic, for example, or Linus is looking at, um, domestication of pigs or cows or whatever it is through ancient genetic signatures, for example.

[00:16:41] Or we have people working in Alaska on hunter-gatherer sites over there. We've got Josh who's working in Mongolia on field survey, so collecting objects on the ground, recording sites through things like drones and laser scanning. So archaeology is this incredible discipline that [00:17:00] really broaches the humanities to the hard sciences. So I don't think there's any other discipline quite like it really.

[00:17:08] **Tamsin:** How does a dig actually work? Do you just rock up with a little shovel and have at it? Like what's the process for this?

[00:17:15] **Professor Gordon Noble:** Yeah. So, I mean, they're all different, so I can only best describe Burghead to you, I think.

[00:17:20] So the archaeology Burghead is actually buried at times under up to a meter, or a meter-and-a-half of overburden. So we actually, we employ the big trowel, a JCB, to come in and take off the topsoil down to the archaeological horizons that we want to be. And we clean up by hand that last kind of section of overburden. [00:17:45] And then after that, there's still a lot of manual labor involved, so there's a lot of shovelling and wheelbarrowing. So it's not the little paintbrushes you sometimes see on, on the program, so it is a very physical job and, you know, that can be a surprise at times, but [00:18:00] hopefully it's worthwhile. So, you know, once you've undertaken some of that heavy labor, you're down to things like trowelling, uncovering the settlement layers, revealing house floors, um, revealing settlement middens, which is basically rubbish heaps.

[00:18:15] And yeah, doing everything from recording by traditional hand drawing, to now we use things like iPads to record all our context information and to laser scan our trenches. We send up drones to record the features from the air. Sometimes you can see the, the, the buildings and the like much more visibly from drone photography or photogrammetry than you can just from the ground.

[00:18:41] So again, it's becoming an increasingly technical discipline, but hopefully still an accessible one. Again, we teach our students how to do all these digital approaches to field archaeology. So yeah, it's a kind of, again, a mix of traditional digging, getting your hands dirty, with some of the kind of [00:19:00] cutting-edge digital technologies that help us record these sites.

[00:19:02] **Tamsin:** What do you think the future of archaeology will look like then? So you've got all this introduction of all the technology, but where do you think that might end up?

[00:19:10] **Professor Gordon Noble:** Oh, good question. I mean, it's been an amazing development, even the last couple of years, I would say. So when I first started digging, which is about 20 years ago, we didn't have any of these technologies.

[00:19:22] So our first attempts were using kites, for example, got kites up and we had cameras on automatic settings to try and take pictures. It was pretty unreliable. So when drones came along, that was just an amazing leap forward. And then we used to record everything by handwriting, and, and drawing, and we still do an element of that, but just the, the power of digital technologies to, you know, type in, in the field, come home, download those records, and that goes into your primary archive.

[00:19:51] It's just, just amazing. So it really has made big progress. So yeah, I can only imagine that's going to continue. So. [00:20:00] Yeah, we'll see where it goes. It's almost impossible to predict where it'll go, but I'm sure it'll continue to advance at quite a steady pace, I would say.

[00:20:07] **Swathi:** So it sounds like Gordon and his colleagues are really at the cutting edge of ancient history.

[00:20:12] **Professor Gordon Noble:** Absolutely. And I think that's what made me really realise why archaeology was so exciting. That's that ability to create your own data, to go out and find new sites that's going to make a huge difference to what we know about a particular time period. And in some ways we knew a lot more about, you know, the Bronze Age or the Neolithic than we did about the Pictish period for a whole variety of different reasons.

[00:20:40] So it does really feel like, you know, with each site that we dig, uh, on the Northern Picts project, then we take a good step, uh, forward in terms of our, uh, understanding. So yeah, that is really exciting and you know, I think it has excited people in Scotland and beyond. So [00:21:00] we run social media pages where we have, you know, almost 18,000 followers on Facebook and about 8,000 on Twitter.

[00:21:06] So I think there's a real thirst out there to find out more about the Picts. Got this amazing art and sculpture, but understanding what on Earth it meant or its context was sorely lacking.

[00:21:18] **Tamsin:** What are some of the new things that have evolved following this dig and your current work?

[00:21:23] **Professor Gordon Noble:** Yeah, just some incredible surprises, I think. For example, we were working at Rhynie on this Pictish site, which dates from the 4th to the 6th or 7th centuries AD. This is one that goes from the late Roman period through into the post-Roman time period. And traditionally we've seen these societies as being really small-scale kingdoms, if kingdoms at all, you know, just developing kind of polities.

[00:21:48] But at Rhynie, inside this hill fort we've got 800 houses and every one we've dug so far, which is still a small sample, dates to the Pictish period rather than, you know, the Bronze Age or the like. [00:22:00] So it suggests we've got a huge, huge community there. And this is, I think, the largest early medieval site we know in Britain and Ireland.

[00:22:08] So it suggests the scale of society was much larger than we'd countenanced. And how do you support a community that large? It does suggest that you're getting quite developed forms of, of governance and society developing in order to support these communities. Even if it's like a seasonal site, for example, you must have a lot of wealth coming into that landscape and

probably a fairly hierarchical society in order to support these big, big centres essentially. So yeah, that was a big development.

[00:22:39] **Tamsin:** As technology advances, then, are you able to find more and find out more, so tell even more of the story?

[00:22:45] **Professor Gordon Noble:** Yeah. So, one of the really cool things we did a few years back with Tap o' Noth, this, this hill fort at Rhynie, was use LiDAR, which is like laser scanning from a plane, landscapes, and you can pick up really, you know, [00:23:00] um, subtle, uh, differences in topography. We also did drone survey on a grid pattern of photogrammetry, which is a bit like laser scanning in some ways, creating topographical models. So it's really progressing things on that level. And then, yeah, just in terms of identifying sites through things like crop marks or digital elevation models, it's made a huge, huge difference to what we can find and how we record it as well.

[00:23:28] **Tamsin:** You mentioned that students were on the dig with you recently, so students who come to Aberdeen, they get the practical and the theory sides of things or how do you teach something like this where you're really constantly uncovering things?

[00:23:41] **Professor Gordon Noble:** Oh yeah, it's a real mix, so in your first couple of years at Aberdeen you'll mainly be doing class-based activities, but we'd go on field trips to see some of the archaeological sites. And it's really, at the end of your second year, you'll come on one of our field schools, if you're a single honour student, and there you can get hands-on [00:24:00] practical training in field excavation, surveying, that kind of thing.

[00:24:04] So we pride ourselves of being quite a practical-focused degree. So I think in archaeology you learn this amazing array of skills, not just kind of classroom-based teaching. So yeah, I think it's really good opportunity. And yeah, our volunteers work alongside us as well. So it makes for a really good kind of team approach to investigating sites.

[00:24:32] **Tamsin:** So how can somebody who's interested in this get involved?

[00:24:36] **Professor Gordon Noble:** So we have a undergraduate program in archaeology. So you can do single honours archaeology, or you can do joint with subjects like history or anthropology, or part of a geosciences degree, for example. You can also do it postgraduate level, which is what I did.

[00:24:52] So my first degree was History of Art. Then I went off and did a one year master's in archaeology. So we have programs in [00:25:00] osteoarchaeology, human bones, archaeological science, cultural heritage, and more kind of mainstream, traditional archaeology, archaeology of the North, for example, and Viking Age archaeology.

[00:25:13] We have postgraduate degree, research degrees at PGR level, and we also offer a certificate anyone can do in their spare time. So it's like a continuing education-style qualification. Gives you a certificate or soon to be a diploma at the end of, uh, two or four years, uh, of study. Uh, so there's lots of different routes into it.

[00:25:37] And then you can also volunteer on our sites as well, which is the way in that some people find, and they go, right, that's it, I want to come back and do a degree, or I want to do the certificate. So yeah, hopefully there's lots of ways you can get involved in archaeology.

[00:25:56] **Tamsin:** Thank you to Professor Gordon Noble for sharing his fascinating work with us. [00:26:00]

[00:26:00] **Swathi:** If you'd like to find out more about studying at Aberdeen University, come to one of our open days and see our historic campus. You can also download our digital prospectus at www. abdn. ac. uk

[00:26:14] **Tamsin:** And to hear more, check out the rest of the Beyond Boundaries podcast.

[00:26:17] Each episode discusses the groundbreaking research of one of Aberdeen's academics.