As a seasonal allergy sufferer, Alan Harvey, Ph.D., biology professor in the College of Science and Mathematics, was curious what types of pollen were causing his sniffles and sneezes. As a scholar and educator, Harvey did what any curious mind would do — he began exploring the types of pollen in the region while trying to narrow down the culprit of his symptoms. What he didn’t expect to find was an interesting narrative that led to a collaborative art-science project and soon a full exhibit on pollen at the Georgia Southern Museum. Read on to learn more about Harvey’s research on pollen, upcoming exhibit, “Pollen Nation,” and why pollen season begins earlier each year.
Q: Tell us about yourself — Who are you? What do you teach? How long have you been a professor here?

A: I’m a professor and faculty member at Georgia Southern. This is my 23rd year here and I teach a variety of biology courses including field biology, invasive species and evolutionary ecology.

Q: How long have you studied pollen and what interested you in studying this?

A: I’ve not actually studied pollen for that long. I really wanted to figure out how to deal with my own severe allergies to it.

Q: What is the most common pollen in our region?

A: The most common pollen depends on the time of year. Any plant that produces flowers will produce pollen. But if you’re looking at a plant with nice, pretty flowers, that pollen is not going to be what you’d normally encounter or notice causing your allergies because that pollen is being transmitted by insects or other pollinators who are specifically being attracted by the pretty flowers.

The kind of pollen that you do encounter is from plants that you wouldn’t even notice have flowers like oak, maple and birch trees. Those are all wind-pollinated, so they don’t need pretty flowers. They’re not trying to attract anybody, they just have to produce a lot of pollen for the wind to blow around. This time of year, pine and oak are going to be the two common pollens.

Q: When does pollen season usually begin in our region?

A: It starts in the early spring and ends in late fall. And again, it’s different plants blooming during the course of that year. So this time of year, as I mentioned, is going to be pines and oaks. In the middle of the year, it will be more grasses, and toward the end of the year, it’s going to be things like ragweed. What scientists have discovered is that every year the pollen season starts earlier and lasts longer.

Q: Why will it begin early this year?

A: This is where we get into a sort of controversial subject, but basically, climate change issues are the main culprit in a couple of ways. First of all, plant growth is tied to temperature. So the earlier temperatures get warmer, the earlier in the year the plant is going to start actively growing and producing pollen. So, warmer temperatures are leading to earlier seasonal starts.

Temperatures are warmer than they were at this time a few decades or 100 years ago.
Q: Why is pollen important?

A: It’s an essential component of sexual reproduction in plants, so in the absence of pollen, we would lose many, if not virtually all of the plants around us that we depend upon. It’s fundamentally important to life on Earth that those plants are able to continue to reproduce. In terms of its impact on known pollinators, when a bee visits a flower, it is, of course, looking for nectar that the plants produce, but they also are looking for pollen. So it’s a food source for a lot of animals as well.

Q: What is an interesting fact or little-known fact about pollen?

A: Pollen plays a role in some various religious ceremonies of other cultures. The one I’m most familiar with is in the Navajo Nation. In particular, corn pollen is at the core of a great many, if not virtually all, of the Navajo religious ceremonies. It’s also been used to solve crimes and there is a whole field of forensic pollen analysis.

It’s also an important tool for paleontologists, anthropologists and archaeologists who are trying to understand past civilizations. Because pollen is incredibly resilient, it may be small, but it is darn near indestructible. You would need a pretty powerful microscope to see any of these, but with that tool, you can study pollen grains that are hundreds of millions of years old. They will last that long. They’re so, so tough.

Q: Tell us about the new mural in the Biological Sciences Building — What inspired it? Who helped work on it?

A: A number of years ago, a colleague in the Betty Foy Sanders Department of Art, Jeff Shmucki, and his wife Wendy Deschene and I came together and started collaborating on art-science projects because we realized we both are observers of the natural world, we just approach it from somewhat different ways. One of those projects was creating a mural of ecologically or environmentally important organisms surrounding students that they may not be aware of. For the first mural, we looked at salamanders of Georgia. We got a bunch of photographs of the salamanders and we cut them away from the background, blew them up and installed the murals. It was a big community project and students got involved in all phases of it.

So I thought, ‘Well, that was really successful.’ What can we do next? And because I was in the middle of allergy attacks, I thought, ‘Well, what about pollen?’

Q: Tell us how the mural inspired your upcoming exhibit, “Pollen Nation,” at the Georgia Southern Museum.

A: There are a lot of interesting layers to this basic idea of pollen that can’t really be shown in a mural, and the Georgia Southern Museum is a perfect place to explore those kinds of ideas in one common theme.

Q: What can people expect to see at the “Pollen Nation” exhibit?
A: There’ll be a lot of big, spectacular images of pollen and the plants that produce them. It’s going to be a mix of striking imagery and some interactive sort of game-like activities. You’ll also have the opportunity to look at some of the pollen in a microscope.

Posted in Press Releases

Georgia Southern chef to participate in ‘Taste of College’ series in Thomas County Schools

March 22, 2022

Executive chef Clay Culpepper cooking in a Georgia Southern University kitchen. He submitted his recipe for Thomas County schools as part of their “Taste of College” event.

A Georgia Southern University chef is hoping to turn his cooking talents into a recruitment tool for his university.

The recipes of executive chef Clay Culpepper will be featured in Georgia’s Thomas County School System for its “Taste of College” series April 25-29. For the event, chefs from five Georgia colleges and universities were invited to submit recipes to try on students.
Culpepper won’t be cooking for the school. Rather, he was asked to send his recipes for the school staff to follow. His menu includes blackened chicken, slow roasted beef brisket, mashed potatoes, honey balsamic glazed baby carrots, steamed broccoli and apple salad.

He said he chose items that stood apart from traditional menu items like chicken fingers, and also made his selections “user friendly” for the staff who will have to follow his instructions.

Even though it adds a little bit more stress to the middle of the semester, Culpepper said he’s looking forward to making an impact.

“It’s a nice feeling to be asked to participate in something and to get our name out there and in with high school students that may potentially want to come to school here,” said Culpepper. “That’s really what it comes down to.”

Culpepper is the executive chef in the Lakeside Dining Commons, and has a bit of a reputation with Thomas County. Eagle Dining Services’ Honey Balsamic Glazed Baby Carrots were recently featured in the Thomas County Schools Monthly Newsletter. Carrots are the Harvest of the Month, which is the Georgia Department of Education School Nutrition Program’s farm to school initiative that highlights an item each month that can be sourced locally and served in Georgia’s school meals.

Posted in Press Releases

Tags: Eagle Dining