But Paul Snyder, program coordinator in CFAES’ Secrest Arboretum, suggests seven other holly types that gardeners can grow in the Buckeye State. You can plant them come spring. They’ll look good year-round. Down the road, some of the types can provide cut branches for making your holidays jolly.

**Winterberry.** A deciduous North American native, winterberry drops all its leaves in the fall. What’s left are bare branches covered with dozens, even hundreds, of berries—eye-popping, drabness-fighting, standout red berries. The cut branches are great for decorating.

**Inkberry.** Also a native of North America, inkberry is fond of pine woods and sea coasts. But inkberry, like most hollies, is evergreen. Its berries, usually black, are the source of its name.

**Longstalk holly.** Its berries give this plant its name as well. They’re borne atop 1- to 2-inch stalks, and the plant can grow 30 feet tall.

**American holly.** Its leaves look the most similar to English holly’s leaves. They’re glossy green with pointy spines. Snyder, a fan, says American holly “is slow-growing in Ohio and becomes very graceful with age.”

**Finetooth holly.** This holly looks like winterberry, except its red berries are smaller and it’s not deciduous. It’s semi-evergreen, meaning some of its leaves hang on in the winter.

**Japanese holly.** This holly, meanwhile, resembles a boxwood. Dense with branches, it has small, rounded, dark-green leaves. Also like boxwood, you can use its cut branches in wreaths.

**Meserve hybrid hollies.** Green or bluish-green and beautiful, these hollies are crosses between tsuru holly and English holly. Meserve hybrid hollies are commonly grown in home landscapes. As sources of cut branches, they’re often preferred over American holly. Their leaves are glossier, and their spines are less sharp.

As a final point, Snyder notes that all holly types are dioecious. “That means male and female flowers are borne on separate plants,” he said. “So in order to get berries, you need a male pollinator.” But not just any male pollinator. It should belong to the same species as the female, should have the same bloom time, and should be planted somewhat near the female. Plant catalogs and garden center staff can help you pick the right pairings.

Read more and see photos of all seven holly types at [go.osu.edu/CZNX](go.osu.edu/CZNX).

The Ohio Agricultural Research and Development Center (OARDC) and Ohio State University Extension are, respectively, CFAES’ research and outreach arms.
Serving up a safe holiday meal

Food poisoning is no way to end a holiday meal.

With thoughts of turkey, stuffing, cranberry sauce, and desserts floating through your head, CFAES food safety experts want you to take some basic food safety precautions when preparing, serving, and storing your holiday feast.

First things first, always wash your hands before, during, and after food preparation. That might seem like a no-brainer, but you’d be surprised at how many people forget to do this simple step when preparing food. According to a study sponsored jointly by the American Society for Microbiology and the American Cleaning Institute, only 77 percent of people say they wash their hands before handling food.

It’s also important that you don’t make food to share if you or someone in your home is sick, advises Jenny Lobb, family and consumer sciences educator with OSU Extension. Doing so could result in you unintentionally sharing those germs with others.

Here are some other tips for your holiday gathering from CFAES food safety experts:

• To limit the frequency with which prepared foods are touched by hand, prepare items that can be served with utensils.

• To help keep foods from entering the “danger zone,” the range between 40 and 140 degrees in which bacteria multiply rapidly, do not leave perishable foods—especially meat, poultry, seafood, and eggs—at room temperature for more than two hours.

• To keep hot foods above 140 degrees throughout the gathering, use a slow cooker, chafing dishes, or other types of warmers.

• To help avoid any allergic reactions in your guests, notify them of any potential allergens such as nuts, soy, milk, eggs, wheat, and fish or shellfish that were used when preparing your feast.

If you have any leftover turkey or other meat, remove the meat from the bone, slice it into smaller pieces, store it in small containers in the refrigerator, and eat it within four days. If you want to store the meat longer, pack it into freezer bags or other airtight containers and place it in the freezer.

Cover and wrap any other leftover foods in airtight packaging, or seal them in containers for storage in the

Only 77 percent of people say they wash their hands before handling food.

AMERICAN SOCIETY FOR MICROBIOLOGY AND THE AMERICAN CLEANING INSTITUTE
refrigerator. This helps to keep bacteria out, retain moisture, and prevent the leftovers from picking up odors from other foods in the refrigerator, according to the U.S. Department of Agriculture. When refrigerated this way, leftover foods are safe to eat for up to four days.

Taking care to store leftovers correctly can help you avoid getting a bad case of foodborne illness. According to the Centers for Disease Control and Prevention, Clostridium perfringens is one of the bacteria that can grow in cooked foods that are left at room temperature for too long after cooking. It also produces toxins that cannot be inactivated by reheating foods.

In fact, C. perfringens is the second most common bacteria causing foodborne infections. As many as one million individuals are affected by C. perfringens each year, according to the CDC. C. perfringens food poisoning symptoms include severe abdominal cramps and pain, diarrhea, and flatulence within six to 24 hours after eating foods that contain high numbers of bacterial cells.

Another interesting fact: Clostridium perfringens outbreaks occur most often in November and December, with many of the outbreaks linked to turkey and roast beef.

Heritage turkeys increasingly popular

**In recent years, a growing number of people are flocking toward buying heritage turkeys for their holiday meals.**

Not only do consumers say the birds taste better, but they also say they like how the turkeys are raised.

Heritage turkeys, a class of turkey that encompasses more than 10 different breeds including Auburn, Narragansett, and Slate, have an upbringing more like that of wild turkeys. They’re raised largely outside, while the majority of turkeys sold in grocery stores typically spend more time inside than roaming the outdoors.

Heritage turkeys also take longer to grow—about six weeks longer than typical supermarket turkeys, which reach market weight in a shorter period to save on feed costs, said Mike Lilburn, a CFAES poultry science professor.

“They’re a niche product,” Lilburn said. “A lot of it has to do with a younger generation of consumer.”

That’s the generation favoring foods that are organic and antibiotic-free.

Flavor matters, too.

“The perception is it’s a better-tasting bird. And I’m not going to argue that it’s not,” Lilburn said.

Most turkeys sold in supermarkets have a higher proportion of white meat (breast meat and wings) than dark meat (drums and thighs), but heritage turkeys have more equal proportions of both types of meat. Since white meat cooks faster than dark meat, the white meat can sometimes dry out in the oven while the dark meat is still cooking. So, heritage turkeys can wind up being juicier.

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**Clostridium perfringens is one of the bacteria that can grow in cooked foods that are left at room temperature for too long after cooking. It also produces toxins that cannot be inactivated by reheating foods.**

CENTERS FOR DISEASE CONTROL AND PREVENTION
Christmas trees, inside and out

Given good care and plenty of water, a cut Christmas tree should last indoors at least a month, says CFAES forestry expert Kathy Smith. Among her suggestions is to use a tree stand that holds at least a gallon of water and keep it filled. Get more keep-it-green tips at go.osu.edu/CZK9.

Want to decorate a living Christmas tree instead, and then plant it outside? Watch a CFAES how-to video at go.osu.edu/CZK7. Then, see what fully grown Christmas trees look like living in the landscape—think big, tall, festive, and green—on a photo tour of CFAES’ Secrest Arboretum: go.osu.edu/CZND.

Annual poinsettia sale benefits CFAES students

Poinsettias, ranging in pot diameter size from 2 inches to 10 inches will be for sale Nov. 28–29 at the Howlett Hall Greenhouses, 680 Vernon Tharp St., on Ohio State’s Columbus campus. Proceeds from the annual sale benefit student members of CFAES’ Pi Alpha Xi (PAX), a horticulture and floriculture honor society.

The sale is from 7 a.m. until 6 p.m. each day. Proceeds support PAX student members’ travel, education, and scholarships. The price for a 6.5-inch potted poinsettia is $12, with prices slightly lower to higher for smaller and larger plants. Also for sale will be Christmas cactus, cyclamen, and pine trees. Wreaths and holly berry bunches will also be available for purchase.

Holiday budgeting

The holidays are soon upon us, and many of us feel that we need to spend money to ensure an enjoyable holiday season for ourselves and our families. But to ensure that you don’t go into the new year with unnecessary debt, personal finance specialists with OSU Extension offer numerous resources to help reign in your spending while still enjoying the holiday season. The Live Smart Ohio blog offers tips and tactics to help you plan your spending and come up with smart budgets to live by: livesmartohio.osu.edu.

Rate a poinsettia

CFAES’ PAX student poinsettia sale, mentioned earlier on this page, serves a research purpose, too. Shoppers at the fundraising sale are invited to view and rate (on a scale of 1 to 5) more than 40 poinsettia varieties growing in an adjacent greenhouse. CFAES Department of Horticulture and Crop Science researchers compile the ratings, which give a helpful glimpse into consumer preferences, and share them with poinsettia breeders and growers. The breeders consider the ratings as they develop future varieties, and the growers use the ratings to select which varieties to plant the next year. Watch for details at cfaes.osu.edu/news/events.