

EYE ON INVASIVES

NO VACATION FOR INVASIVES

As we near the end of 2020, and enter the holiday season, it's easy to forget about the threat of invasive species. But beware, invasive species don't take a break for the holidays. Whether you are decorating your home with festive greenery or cutting down your own Christmas tree, this time of year provides multiple opportunities for invasive species to spread. Unwittingly, you may be inviting some unwanted guests home for the holidays. And these guests – they may never leave!

This issue covers some of the ways invasive species can spread within and across our state during the holiday season, and actions you can take to ensure you don't create the opportunity for them to invade your surrounding areas. We'll also introduce you to an unwelcome little bird causing significant impacts to the natural environment to keep your eyes out for during your Christmas bird counts. No, we're not talking about wild turkeys—but no holiday issue would be complete without mentioning those, too.

We hope you will follow the guidelines and suggestions included in this issue, because our individual actions are important in preventing the spread of invasive species and protecting California's rich and diverse natural resources.



The mission of the Invasive Species Program is to reduce the negative effects of non-native, invasive species on the wildlands and waterways of California.

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KEY LINKS

- [Keep Me Wild: Wild Turkey](#)
- [Join an Audubon Christmas Bird Count](#)
- [California's Invaders: Brown-Headed Cowbird](#)

DECK THE HALLS

It's that time of year again! As we prepare for the holidays, we may consider decorating our homes and businesses with seasonal plants and cuttings, unaware that several of these popular holiday plants can be invasive. Though we do not recommend decorating with invasive plants, if you do opt to use them it's important to properly dispose of them so they don't escape and harm California's ecosystems.

English ivy (*Hedera helix*) is commonly used in wreaths and table decorations. If let loose in the wild, it can grow unchecked and can drastically affect tree growth, outcompete native ground cover species, and cause damage to residential and commercial structures. This plant should be handled very carefully as it is incredibly difficult to remove once established and spreads very easily from stem fragments. If you find this plant is a necessity in your home over the holidays, please do not plant it outdoors after the holidays, and dispose of trimmings in the trash, not in green waste, as they remain viable for a long time, and root very easily. As an alternative to English ivy, consider using alumroot (*Heuchera micrantha*) instead, which is safe to plant in your garden after the holidays and produces beautiful pink flowers in the spring and summer!



Invasive English Ivy in a forest near Spanaway, Washington in the Pacific Northwest.



Invasive European Mistletoe growing in an apple tree in California.

HEALTH FACT:

All holly berries are toxic if consumed. While not deadly, the berries could cause mild to moderate symptoms of sickness. Special care should be taken around children and pets if you plant or use holly for decoration.



Hang a sprig of mistletoe over your doorway. History has it, kissing under the mistletoe will ensure enduring love or protect your home from lightning or fire, among other folklores. European mistletoe (*Viscum album*) is native to Europe and western and southern Asia and a common invader to urban forests and wildlands in California. It is a hemiparasitic plant, which means it relies on other plants (usually trees) to get water and nutrients and uses these stolen resources to support its photosynthesis, growth, and flowering. As a result, the host tree is deprived of those resources, hindering its growth and vitality, leading to death of branches, and with prolonged heavy parasitism, death of the tree. Rather than collecting mistletoe from local trees, instead consider purchasing commercially harvested American mistletoe (*Phoradendron leucarpum*) during the holiday season. This species is native to the United States and Mexico and is a less aggressive invader. And when the holiday decorations come down, dispose of this plant in your trash—not your green waste—so that it is incinerated or buried in a landfill, reducing its risk of spreading.

European holly, also known as English holly, (*Ilex aquifolium*) is a common decoration because of its big, beautiful red berries. Unfortunately for the United States' forests, birds think European holly planted outdoors is beautiful—and tasty, too! The birds eat the berries, then fly into wildlands and deposit the seeds in forests where they grow into dense mats of holly bushes, ultimately outcompeting native plants. Fortunately, there are new Meserve Hybrid Hollies available at most local nurseries that don't pose the same environmental threats as the older varieties, whether for your yard or holiday decorations.

Keep these alternatives in mind as you begin decorating for a festive holiday season and take the necessary precautions to ensure our native ecosystems are protected.

HOLIDAY TURKEY DINNER

What's on your plate for the holidays? For many Californians, turkeys are not just in the grocery store—they can also be found on your lawn or in nearby open spaces. You may have wondered, 'How does that turkey relate to the one in the grocery store, and ...can I save myself the trouble of defrosting that massive Butterball®?' Wild turkeys are a nonnative game bird that was introduced to California in the 1870s by ranchers. You may be surprised to learn it is the same species as the domestic turkey, *Meleagris gallopavo*, commonly raised as livestock. But the domesticated and the wild versions are very different. Since wild turkeys have a varied diet of seeds, leaves, fruits, buds, acorns, pine nuts, and arthropods, their meat is reported to be more flavorful than that of their domesticated birds of a feather. Through selective breeding and increased feeding, domestic turkeys are mostly white, and on average, twice the weight of wild turkeys! As a result, the domestic turkey is not able to fly. In 2019, according to the US Department of Agriculture, the United States produced 5.89 billion pounds of turkey meat for markets and holiday dinners worldwide.

Today, the wild turkey is a popular game bird for California hunters. The North American turkey population has increased through restoration efforts, but their numbers remain below the estimated 10 million birds in pre-Columbian times. In California, there have been some environmental drawbacks to the introduction and establishment of wild turkeys. Turkeys are known to impact herbaceous and deciduous plants and landscaping, though their ecosystem-level impacts have not been intensely studied in California.

Californian residents have also found wild turkeys to create urban disturbances. Some flocks forage

through gardens and yards, leaving behind unwanted messes and, on occasion, damage property by scratching and pecking. In addition, birds living in urban settings become comfortable among humans and aggressive when feeding is expected. The biggest cause for these nuisance behaviors is unintentional (or intentional) feeding. By feeding flocks, residents encourage the birds to stay in a smaller area close to a source of reliable food and roost nearby in trees. You can help prevent turkeys from becoming an issue in your neighborhood by cleaning up under bird feeders, securing trash cans, and ensuring no accessible pet food is left outside. Check out this web page for more information about [keeping turkeys wild](#).

So, will you be bringing home a bird for a holiday dinner, be it domestic or wild? If you are interested in hunting for your turkey dinner, the wild turkey season runs from November 14th to December 13th for licensed California hunters with an upland game bird validation. Be sure to refer to the current hunting regulations for further guidance.



Wild turkeys forage in open spaces. Urban flocks can quickly become a nuisance for neighborhoods.

DON'T INVITE INVASIVE PESTS HOME FOR THE HOLIDAYS

Who does not love the sight and smell of a fresh-cut Christmas tree or a beautifully crafted wreath adorning one's home during the holiday season? But beware, these objects of beauty and joy may harbor an unwanted stowaway—invasive pests.

Invasive pests are any organism, in this case, insects or pathogens that are not native to an ecosystem and, when introduced, cause harm to the environment, economy, and even human health. Some invasive pests to California found hitchhiking on Christmas trees or other plant materials we use for the holiday season include Gypsy moth, Pine Shoot beetle, European Pine Shoot moth, and a fungus responsible for Sudden Oak Death. These pests can damage and even kill trees, thereby negatively impacting the state's lumber industry, increasing the fuel load for wildfires, and reducing food and shelter for wildlife. Some pests could even spread into agricultural lands, causing damage to our food supplies.



*European Pine Shoot
Moth*

*Photo by USDA Forest
Service*

The U.S. Department of Agriculture (USDA) and the California Department of Agriculture (CDFA) have developed guidelines for growing, harvesting, and shipping fir and pine products that may harbor invasive pests. CDFA and the various county agricultural departments implement rigorous inspection protocols to screen for invasive pests on these products coming into our state for the holiday season.

So, when choosing Christmas trees and other greenery for this holiday season, let's do our part by following some simple guidelines to help ensure that we don't transport invasive pests into or throughout our state.

1. **Go local** – For those craving the experience of cutting down their own Christmas tree and live close to a participating National Forest, getting a Christmas Tree Permit is a great way to find your perfect tree while keeping potential invasive pests within a confined area. By participating in this permit program, the dense stands of trees are thinned out, thereby keeping our forests healthier and reducing the chance of massive wildfires.
2. **Buy local** – Whether you visit a reputable local tree farm or tree lot, you know that these trees have been grown under conditions that comply with the regulations and quarantines imposed to reduce the chance of transporting invasive pests.

3. **Pick a healthy tree** – Whether you cut your own or buy a cut tree, make sure the tree is green and springy. A brittle, brown tree that is shedding needles is not only a fire hazard within your home, but it could also be harboring invasive pests and diseases.
4. **Use local plant material** – Make your own wreaths and displays from local plant material from your own property or a nearby property with the owner's express permission. Avoid buying live plant products from private sellers on the internet—especially those from out of state.

These sources often don't know or simply choose not to comply with the necessary regulations or quarantines intended to keep harmful invasive pests out of California.

5. **Properly dispose of all greenery** – Do not place discarded greenery in your backyard or in open spaces—that is an invitation to spread invasive pests. Instead, put these trees on the curb or in your green waste container for municipal composting, or if you do not have that service, simply place them in your trash.

Keep the holidays green and invasive pest free!

Damage in a forest from Sudden Oak Death;

Photo by USDA Animal and Plant Health Inspection Service



DID YOU KNOW THIS IS INVASIVE?

Brown-Headed Cowbird

The brown-headed cowbird (*Molothrus ater*) is native to the Great Plains Region, where they forage in close association with bison and feed on seeds and insects stirred up by the grazers. Forest clearing and domestic cattle introduction likely facilitated their expansion to California. They reside in coastal California and the Central Valley year-round, with populations present across northern California, the Sierra Nevada, and patches of inland desert regions during the summer breeding season. Brown-headed cowbirds belong to the blackbird family and can be distinguished from other blackbirds by their smaller size, shorter tail, and thicker head with a stout bill. As their name suggests, the male brown-headed cowbird has a brown head with a glossy black body. The female is gray-brown, with lighter coloration on

the head and body's underside and brown streaking on the breast. They range in size from 6 to 8.5 inches in length with a wingspan of 12 to 15 inches, while males are slightly larger than females.

As obligate brood parasites, brown-headed cowbirds do not make their own nests but rather lay their eggs in the nests of other bird species and rely on the "host" parents to raise their young. The brown-headed cowbird female waits for an unsuspecting nesting bird to leave her nest, then quickly swoops in and lays her egg, often destroying one or more of the host bird's eggs in the process. The relatively short incubation period of cowbird eggs, which often hatch before the host's eggs, and the fast growth rate of cowbird nestlings, which outcompete their nestmates for food, reduces the host species' nesting success. Because cowbirds have cleverly outsourced the rearing of their young, the absentee cowbirds are prolific, and a single female can lay up to 40 eggs in one season! In California, nest parasitism by the brown-headed cowbird, along with habitat loss, have contributed to the decline of riparian songbirds including the Least Bell's vireo (*Vireo bellii pusillus*; state and federally endangered) and southwestern willow flycatcher (*Empidonax traillii extimus*; state and federally endangered).

You can help deter brown-headed cowbirds by using feeders that are made for smaller birds and avoiding platform trays. Cowbirds prefer sunflower seeds, cracked corn, and millet, so try offering nyjer seeds, suet, nectar, whole peanuts, or safflower seeds instead.

A brown-headed cowbird nestling already outgrowing its dark-eyed junco "host" parent.

Photo by Bob Gunderson.



If you observe brown-headed cowbirds in the wild in California please report them to the CDFW Invasive Species Program. Reports can be submitted by email (Invasives@wildlife.ca.gov), by telephone (866-440-9530), online [<https://wildlife.ca.gov/Conservation/Invasives/Report>], or on your smartphone through our new EDDMapS reporting application.



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INVASIVE SPECIES PROGRAM

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