

Helping native pollinators winter over

By **Debbie Marsh**

RMC Communications Team

We see them buzzing and flying about all summer long, pollinating our garden vegetables and flowers as well as native plants. Aside from Monarchs and hummingbirds, which fly south for the cold season, what happens during the winter to all the bees, flies and beetles that are native pollinators?

If you are one of those gardeners who has felt inferior to your neighbors who fastidiously clean up every shred of plant debris and till the soil in November to be ready for spring, it's time to stand tall and proud for having a "messy" garden. Old bark, cane, leaves and especially undisturbed soil are the secret winter homes of pollinators. Some have gorged like bears to make it through the winter; others wait in suspended animation as larvae, pupae or eggs.

Charming Goliaths of the bee world, bumble bees winter over as adults in hibernation. Bumble bees are unusual in that they can still forage in very cold temperatures due to internal thermoregulation. But in fall, all the males die off and the new queen searches for a log, tree root or other niche where she waits, already mated and fertilized, to emerge and begin a new colony when the weather warms.

Another bee that seeks out logs for winter is the bright green sweat bee, which prefers to nest under peeling bark. Dead logs are particularly attractive locales. Like her cousin the bumble bee, it's only the female that overwinters, and she must quickly rebound to raise a brood in spring.

Some native bees snuggle into hollow twigs or the pathways dug by beetle larvae in trees. Mason and leaf-cutter bees count on these sources, as well as clumps of dried grasses or hollow canes from brambles or other woody plants, to provide shelter during the winter.

The majority of native bees nest in the ground, finding a sunny spot that won't flood. It may be a few inches of bare soil with one nest, or a colony occupying several feet. You may have mistaken them for anthills or spider holes. Usually, the mother bee dies at the end of the warm season, leaving her babies to emerge in spring.

Butterflies and moths also use leaf litter and plant matter to insulate them from the long, cold winter. Tiger swallowtails that hatch in the summer feed and molt five times, then pupate and hatch in as little as 15 days. But when the caterpillar pupates in the fall, the chrysalis is brown instead of green to match the woody brush where it hangs, and the butterfly won't emerge until spring.

So, now that you know how many species are counting on you to leave soil undisturbed, piles of leaves untouched, and shrubbery unpruned over winter, you can feel good about being the untidy gardener! And if you'd like to fashion some homes for bees, that's entirely possible. Here's one plan <http://www.nativebeeconservancy.org/projects/pollinator-houses/> that works well for the 30 percent of native bees that live in tunnels. A myriad of others are available; to see their diversity and artistry, check out "native pollinator houses" and click on "images". It's also possible to make butterfly and bat houses, and winter is a great time for woodworking projects!

From an article by Beatriz Moisset at <http://nativeplantwildlifegarden.com/pollinators-and-the-garden-in-winter/>

Article Submitted to NN by Peg La Point



National Geographic

Endangered Species Act Celebrates 42nd Anniversary

From Bob Ross

On the 28th of this month the Endangered Species Act (ESA) will celebrate its 42nd anniversary. The Act was signed into law by President Richard Nixon on December 28, 1973.

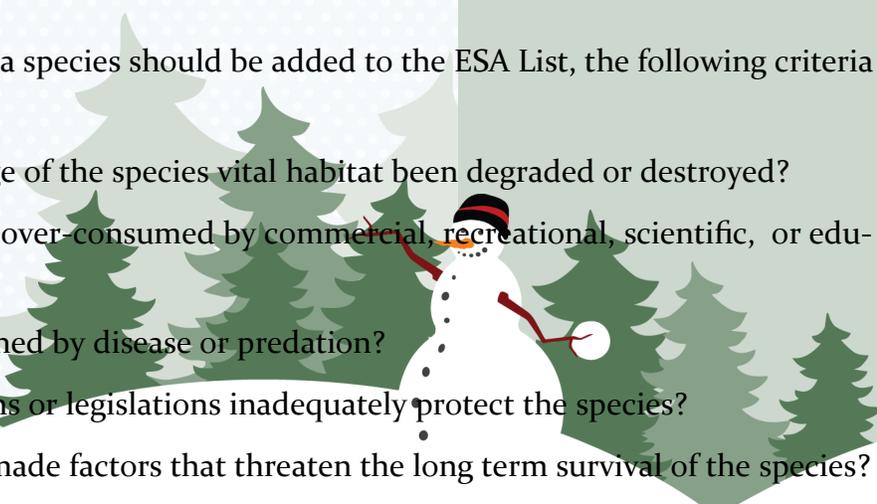
ESA has been credited with saving such American icons as: the bald eagle, the Florida manatee, and the California condor. Less than 1% of the more than 2,000 plants and animals protected by ESA worldwide have never been delisted due to extinction.

Under ESA, species may be listed as **endangered** or **threatened**. Threatened means a species is likely to become endangered within the foreseeable future.

Who decides which species get ESA protection? The U.S. Fish & Wildlife Services (FWS) oversees the listing and protection of all terrestrial animals and plants, as well as, freshwater fish. The National Marine Fisheries Services (NMFS) oversees marine fish and wildlife.

When deciding whether a species should be added to the ESA List, the following criteria are evaluated:

- a) Has a large percentage of the species vital habitat been degraded or destroyed?
- b) Has the species been over-consumed by commercial, recreational, scientific, or educational uses.
- c) Is the species threatened by disease or predation?
- d) Do current regulations or legislations inadequately protect the species?
- e) Are there other manmade factors that threaten the long term survival of the species?



Endangered
Species Act



Field Notes in Focus



'HOPPER AT CCNHC—*FROM GALLERY OF JONATHAN REYNOLDS*



A few announcements

Christmas Luncheon—December 10, 2015, from 10 a.m. to 1 p.m. at Elections Building

In lieu of a gift exchange this year, the Chapter requests that you make a contribution of cash or check to any or all of the following: Blackland Prairie Raptor Center, DFW Wildlife Coalition, Friends of LLELA. Please make your check payable to the specific organization you have chosen. Also, you may make a contribution of useful items for DFW Wildlife Coalition. A list of things they can use has previously been furnished to you.

Notice: A number of people are using my wodum10043@reagan.com email. Please delete that from your contacts list and use only the gmail address listed in Chapter Directory. If you have sent me something lately and I did not respond to let you know that I received it, please re-send it to the gmail address. Thank you ever so much because I surely don't want to miss anything or overlook anyone!

Wanda Odum, NN Editor

