

Wild Ones Louisville: Soft Landings Reimbursement Program: Description and Instructions- 2026-2027

The Soft Landings Reimbursement Program is for residents of Jefferson County, Kentucky and for certain native trees in residential yards in Jefferson County. However, dues-paying Members of Wild Ones Louisville, whose yards may be outside of Jefferson County, may apply.

PURPOSE: To enhance the survival of butterfly and moth pupae under native trees and therefore enhance the survival of more butterfly and moth species in our neighborhoods.

WHAT IS A SOFT LANDING? An area beneath the entire canopy of a deciduous tree that is NOT planted in turf grass, but instead contains non-woody perennial plants, like sedges, ferns and/or short flowering herbaceous plants, and where fallen tree leaves are allowed to accumulate and decay under the tree. This is the kind of habitat needed to enhance the survival of butterfly and moth pupae under trees.

INSTRUCTIONS FOR SUBMISSION START ON BOTTOM OF PAGE 2.

BACKGROUND: THE LEPIDOPTERAN LIFE CYCLE AND WHY PUPAE ARE AT SPECIAL RISK OF BEING KILLED IN RESIDENTIAL NEIGHBORHOODS.

Did you know that species of Lepidoptera (Butterflies and Moths) are the insects at most risk of extinction now? That is because they have a complex life cycle consisting of 4 stages, each with their own needs: **egg to larva to pupa to adult**. Eggs that manage to avoid being eaten hatch into larvae (caterpillars), which need specific plants (host plants) to eat until they become pupae. The pupae, called a chrysalis for butterflies and a cocoon for moths, need a safe place to attach to or a leaf litter layer to burrow into for weeks as they develop during the process of metamorphosis and finally emerge as adult butterflies or moths. Adults need nectar and pollen to eat as they search for mates. Mated females then search for host plants to lay their eggs. In this case, the host plants are native trees.

More butterfly and moth species need native trees to support their caterpillars than any other plant type (vs. shrubs or non-woody plants). And native trees support the highest caterpillar densities, because they have large leaf canopies and are long-lived, so that their presence can be “counted on” by Lepidoptera every year. These caterpillars, in turn, are hugely important food sources for wildlife, especially songbirds, which require thousands of them to rear a single nest of baby birds to fledglings.

Many of us have planted native trees in our yards for their shade, beauty and a perching or nesting location for birds. But few of us are thinking about how they are vital for butterflies and moths. We sometimes notice caterpillars on tree leaves, but very few of us think about what

happens next for them--- becoming chrysalises or cocoons—and as a consequence of our yard management practices, fewer of these pupae survive to become adult butterflies and moths and produce the next generation of their species. Over many years, what happens? We see fewer and fewer adults flying about and some species can go locally extinct and then perhaps regionally extinct. That is how extinction happens- step by step- from local, to regional, to global extinction. ***How we manage the ground beneath our yard trees has everything to do with local extinction and stopping extinction.***

When caterpillars on deciduous trees are getting ready to pupate, some crawl down the trunk of the tree to wriggle their way into soft soil a bit and then pupate. Others attach themselves to leaves to pupate and fall onto the ground below along with leaves in autumn. But, how do many home owners take care of the ground under trees in their yards? If grass is planted, we mow this grass often, killing any pupae below the tree. The soil under grass is also hard-packed, too hard for a caterpillar to burrow into it. When the trees drop their leaves (to which pupae of other species are attached), many of us collect the leaves and bag them for removal as “trash”. Or we mow over those leaves, thinking that way the leaves will decay more quickly and add to the nutrients for feeding grass and the trees. That is true but mowing leaves is not good for the pupae attached to them, is it?

WE NEED AN INTERVENTION: All we have to do is change how we manage the ground beneath our trees to create a soft landing for pupae. This means stopping any mowing, removing grass if it is planted under the tree, expanding the circle of new plantings to include the entire tree canopy, and allowing leaves to accumulate under the tree. As the years go by, those leaves will create a softer, more organic-rich humus that caterpillars and pupae can burrow into and together with the overlying leaf litter serve as a protective blanket for pupae that overwinter in soil.

If you would like to see photos of Lepidoptera that need native trees as host plants, please visit: <https://louisville.wildones.org/wp-content/uploads/sites/71/2026/09/Some-Butterflies-and-Moths-That-Use-Trees-As-Host-Plants2.pdf>

STEP BY STEP INSTRUCTIONS FOR PREPARING AND PLANTING YOUR SOFT LANDING

These instructions are taken from Heather Holm’s invaluable article about Soft Landings. We urge you to read it entirely. It provides photos of different soft landing which is helpful for you to visualize what is intended. We also add certain particulars that we are willing to reimburse you partly for.

<https://www.pollinatorsnativeplants.com/softlandings.html>

1. **Choose an established NATIVE tree.**

- a. It must be a regional native. We provide a list of native trees we are willing to fund for this project here:

https://louisville.wildones.org/wp-content/uploads/sites/71/2026/09/Trees-For-Soft-Landings_Final.docx.pdf

If your tree is not on this list and you KNOW it is a regional native, please email us at wild.ones.louisville@gmail.com with photos of tree, leaves and branch with leaves.

- b. The tree should have a minimum diameter of 4 inches at breast height (4.3–4.5 feet above ground). See photo below.
- c. The tree dripline should be a minimum of 6 ft from the tree trunk. See photo below. The dripline is the outermost tip of the tree's branches projected onto the ground. This is where rainwater naturally drips and it is the spot with the greatest concentration of the tree's tiny feeder roots.
- d. If the tree is large (dripline greater than 9 ft. distance from the tree trunk), you are welcome to go to the dripline, but if that is not feasible, the outer boundary of the soft landing should be AT LEAST 15 FT from the tree trunk, if the dripline is further out.
- e. **We will not fund soft landings of trees in a hellstrip. (an area often with grass that is between a sidewalk and the street.)**
- f. The trunk of a tree should be at least 5 ft away from a public sidewalk.

2. If there is existing vegetation or turfgrass, you will smother it in autumn with cardboard. DO NOT USE HERBICIDES or you will harm the tree roots. Do not dig out the existing turfgrass under the tree. You could damage the roots and trunk in the process. If you still have turf under the tree, in autumn, smother the turf by laying soaked wet cardboard on the turf. DO NOT USE LANDSCAPE CLOTH OR PLASTIC SHEETS which will heat kill those tiny tree roots. Then add a thick layer of leaves and small branches to hold the wet cardboard in place. The cardboard should mostly decay overwinter, but if some of it is left by spring, leave it there. It will be soft enough to poke a hole in for planting a plug or very small plant by spring.

3. If you already have plants other than grass growing under the tree, remove any invasive or undesirable non-native plants with a trowel and augment the planting with new native plants. Some native plants that are often found growing naturally under trees include our native Blue Violet (*Viola sororia*). Leave them if you like them and plant around them in spring.

4. Start building the leaf litter layer in autumn. Rake excess leaves into the soft landing or under the tree. Weigh down the leaves with small branches. Watering the leaves now and again helps keep them from blowing away. ***Do not add any soil or compost on the root system of the tree. Doing so may affect the health of the tree. Tree root systems are***

'lungs' and need to be able to breathe! Cover the soil under trees with natural materials—leaves, twigs, and plant debris only. **DO NOT ADD WOOD CHIP MULCH** ever because caterpillars that fall down cannot burrow their way through a layer of wood chips.

5. In spring, you should be ready to plant. Many trees have shallow roots so you need to be careful and avoid damaging the tree while planting.
Buy small plants (plugs or cell packs) and use a small trowel to carefully dig the holes. **Avoid using a shovel or digging large or deep holes.** Alternatively, the area can be seeded once competing undesirable vegetation is removed.
6. Stay Away From the Tree Trunk. Avoid planting within two feet of the tree trunk to prevent damaging the primary roots and any root flares. Plants will fill this void naturally once established. Keep natural materials—leaves, twigs, and plant debris away from the trunk of the tree to avoid excess moisture. This can lead to bark rot.
7. Plant with native plants grown in cell packs or as plugs. You want to dig using only a trowel to insert the plant. Heather Holm's article provides a species list. **However, we provide a list of plant species appropriate for our region.** *That list can be found here:* <https://louisville.wildones.org/wp-content/uploads/sites/71/2026/09/LIST-OF-NATIVE-PLANTS-APPROPRIATE-FOR-SOFT-LANDINGS.docx.pdf>

We also provide a list of local native plant vendors here:

<https://louisville.wildones.org/wp-content/uploads/sites/71/2026/09/WOL-Native-Nurseries.png>

SPECIAL CASES

Some tree canopies may overlap driveways or other hard surfaces. If the tree is large (at least 9 ft from trunk to dripline), and at least 75% of the soft landing area is plantable, send us a photo of your situation by email to wild.ones.louisville@gmail.com and we will consider it and get back to you.

What you will be reimbursed:

For small trees 6 to 9 ft from the tree trunk to the dripline, we will provide up to **\$125** for native plants per soft landing.

For trees greater than 9 ft from tree trunk to dripline, we will provide up to **\$300** for native plants per soft landing.

PHOTO DOCUMENTATION

1. The Tree.

- a. Take a “before” photo of the tree with a tape measure across the trunk at breast height to show that it is at least 4 inches in diameter.
- b. Take photo of a leaf branch with leaves so we can determine if you have a native species or not.

If you know the species, please tell us.



2. The Soft Landing Area

- a. Stretch out a tape measure from the trunk of the tree across the ground to the dripline. We want to see the tape measure, tree trunk and dripline in photo. Take closeup photo of that distance on the tape measure. Remember, a 6 to 9 ft distance shows this to be in our small tree category. Distances greater than 9 ft, show your tree canopy falls in the large tree category.



- b. Take a photo when you have covered the area with cardboard and leaves.
- c. Take a photo after you have planted in spring. It should be close enough so we can see the plants as well as the overall planted area.

PROOF OF PAYMENT

Proof of payment is authorized in two parts.

1. An itemized invoice or itemized receipt(s) from the vendor. The items are the plant species names and number of plants for each species.
2. You will have to take a photo(s) of the invoice or itemized receipts and submit as jpg or jpeg files. Please be sure they are legible.

Label file as follows: First Name-Last Name-Receipt 1 (Receipt 2 etc. if there were more)

IRONWEED
NATIVE PLANT NURSERY

Date: 10/16/2025 Order#: 1070

Bill To: (Customer Name) Ship To:

Payment Method: Shipping Method: UPS

Code	Description	Qty	Price	Total
Coraur1	Mouse Ear Tickseed	1	\$15.50	\$15.50
Rhacar1	Carolina Buckthorn	1	\$15.50	\$15.50
Colcan1	Citronella Horse Balm	1	\$15.50	\$15.50
Muhcap1	Pink Muhly Grass	1	\$15.50	\$15.50
Melniv1	Snow Squarestem	1	\$15.50	\$15.50
Helife1	Purple-headed Sneezeweed	1	\$15.50	\$15.50
Orbono1	Lance-leaf Scurf Pea	1	\$15.50	\$15.50
Humlup1	Common Hops	1	\$15.50	\$15.50

Subtotal: \$124.00
State Tax: \$7.44
Shipping & Handling: \$0.00
Grand Total: \$131.44

2. a cancelled check or credit/debit card statement. **Cash payments will not be accepted.** Proof of payment documents must be in the name of the individual that was submitted on the reimbursement form.

Proof of payment for plants should be dated from March 1 to May 31, 2027.

SUBMISSION OF FORMS, PHOTOS AND RECEIPTS

We will be having a ROLLING DEADLINE.

People may submit documentation and reimbursement application starting on March 15, 2027. This start date would reflect people having had time to prepare the soft landing in fall and plant throughout the spring. But the absolute deadline to submit documentation will be **June 15, 2027**.

HOWEVER, reimbursements will be approved as they are received until funding is exhausted.

Wild Ones Louisville will be setting aside \$1,500 for this program. This means that we could be reimbursing a maximum of 5 applicants if they are all large trees OR 10 applicants if they are all small trees. PLEASE EMAIL US IN APRIL TO DETERMINE IF OUR FUNDS ARE EXHAUSTED FOR THE PERIOD OR NOT. Our email is wild.ones.louisville@gmail.com

THE REIMBURSEMENT APPLICATION FORM IS A GOOGLE FORM, WHICH WE CAN ACCESS UPON YOUR COMPLETING IT.

HOWEVER, SEND ALL PHOTOS TO wild.ones.louisville@gmail.com In the email subject header, please enter YOUR LAST NAME and Soft Landings Reimbursement. It makes it easier for us to search mail for submissions.

Example: Smith Soft Landings Reimbursement

HERE IS THE LINK TO THE GOOGLE FORM: <https://forms.gle/qQBZSm5HEL9jZM3z7>

FOLLOW-UP. Wild Ones Louisville Board Members will want to visit your yard and take photos of your soft landing in the summer-fall OF 2027 to share online and celebrate your success! We also would like to know if you have suggestions for improving the application process the following year. By participating in this cost-share program, you agree to allow us to take these photos IN YOUR PRESENCE AND SHARE ONLINE.