

Welcome to the Pollinator Garden!

Native plants create healthy habitats where pollinators thrive

Pollinators rely on nectar and pollen from flowers as food for themselves and their young. Butterflies and moths also need leaves of specific plants for their caterpillars to eat. By planting a variety of native plants, you provide the essential habitat pollinators need: food, water, shelter, nesting sites, and overwintering spots.

How you can help!

- Grow a diversity of native plants that bloom from spring until fall.
- Supply a shallow water source and/or damp area.
- Keep fallen leaves, rotten logs, and dead trees for shelter, overwintering, and nesting sites.
- Provide bare ground, bee hotels, and caterpillar host plants to help pollinators reproduce.
- Minimize turf grass lawns, which offer little to no habitat.
- Avoid pesticides, especially insecticides.

Learn more about native species you can plant and other ways you can help pollinators at hendersonvillenc.gov/bee-city.



Purple Passanthe



Butterbush



Swamp Milkweed



Cup Plant



Serviceberry



Pinky Muhly Grass



Monarch Butterfly



Tall Purple Aster

Bumble Bee



Leafcutter Bee



Hummingbird



Hummingbird



Hummingbird



Ruby-throated Hummingbird



Great Black Wasp



Goldenrod Soldier Beetle



Milkweed



Milkweed



Milkweed

All About Bees

- There are 4,000 species of native bees in North America. Some lay eggs in tunnels underground, whereas others create nests in hollow plant stems.
- Most native bees are solitary. This means, after emerging from a small nest, they live alone as adults.
- Honey bees live social and live in large colonies that can include 50,000 individuals!

Pollinator Power

Pollinators play an important role in ecosystems by helping about 90% of flowering plants reproduce. By pollinating more than 1,000 crops, fruits, trees, and ornamental plants, pollinators help generate one out of every three bites of food we eat.

Plants that Provide More

- Cup Plant blossoms provide nectar and pollen. Their thick leaves provide shelter plus catch and store water for thirsty wildlife.
- Milkweed's blossoms provide nectar for many kinds of pollinators, while its leaves provide food for monarch caterpillars.

Promoting Pollinators in Hendersonville

Hendersonville is a certified Bee City USA community working to create healthy habitats and raise awareness of the importance of all pollinators.

This garden of Hands On! Children's Museum is an ecoEXPLORE HotSpot for kids to investigate their local environment and share their observations with real-life scientists. Learn more at ecoexplore.net.

NATURE-BASED EXHIBITS, SIGNAGE, & DISPLAYS

INTERPRETIVE EDUCATIONAL INTERACTIVE



THE LIFECYCLE OF WOOD-NESTING BEES

How do mason and leafcutter bees make their nests?

Both mason and leafcutter bees are solitary, which means they live alone and do not work with other bees to make their nests. They are only alive as adults for 2-3 weeks.

In that time, each female must find holes in dead wood that have already been made by other creatures.

She begins by collecting a ball of pollen that she places at the back of the hole. She then lays an egg on top of the pollen.

She seals off the egg into its own room using her preferred building material and continues the process for each egg until she fills the hole.



Mason bees use mud, dirt, and rocks as their building materials.



Leafcutter bees use leaves to help build their nests.

Sometimes they even line the walls with leaves to help with moisture.



What happens to the eggs inside the hole?

The eggs hatch into a larva and eat all the pollen left behind by their mother. Pollen is full of protein and essential to growing bees.

After they finish the pollen, they spin a cocoon and undergo a complete metamorphosis, like a butterfly.

They then spend a long time as a 'pupa', which is a protective state some insects enter while they wait to emerge at a later time, usually the following season.

Please note: the pieces included in this model are about three times the actual size of a nest found in real life.

Our standard signage services include graphic design, digital illustration, and content creation. Spriggly's can develop the entire sign from start to finish, work with your team to develop and edit content, or design using finalized text provided by the client. Spriggly's works with a variety of printers and materials and also offers designs for touchscreens and websites.

Contact info@sprigglys.com or 828.377.6168 to discuss your project and get an estimate. Discounted non-profit pricing is available upon request.



THE BEES

There are around 4,000 bee species native to North America, with over 20,000 in the world! Have you seen the bees below?

THE WASPS

There are around 18,000 wasps native to North America, with over 100,000 in the world! Have you seen the wasps below?

| | |
|---|--|
| <p>Bumble bee Amazing pollinators Loves every type of bloom Live socially in small nests Extra friendly and fluffy all over Pretty much flying teddy bears</p> | <p>Paper wasp Serve as predators and pollinators Live socially in small nests with open comb, built in sheltered areas Live peacefully on human dwellings Hippie communes of wasp world</p> |
| <p>Carpenter bee Pollinating machines, even in cold weather other bees can't handle Fuzzy thorax with shiny bald butts Live generationally in wood nests Do minimal damage to structures</p> | <p>Yellow jacket Important predators and pollinators Live in large social ground nests Can become ornery and defensive to protect and feed their nests Distribute the seeds of trillium</p> |
| <p>Mason bee Incredibly powerful pollinators Solitary, meaning they live alone Lives in holes found in wood and pithy stems, cannot bore holes Will live in man-made bee hotels</p> | <p>Mud dauber Predator, pollinator, and potter Creates mud nests for its young Lives solitarily, or by themselves Extremely docile, even near their nesting sites</p> |
| <p>Sweat bee Great pollinators that vary in size Like to drink sweat off your skin Are often bright iridescent colors Can be solitary or semi-social Much more likely to bite than sting</p> | <p>Cicada killer Pollinator and specialized predator Solitary hunting wasp after cicadas Larger than all other native wasps Not an Asian Hornet and not to be feared, unless you are a cicada</p> |
| <p>European honey bee Pollinate less than native bees Agricultural livestock used to pollinate monoculture crop fields Not native to North America Only been here since the 1600s</p> | <p>European hornet Predators and pollinators Nest socially in trees Active at night, unlike other wasps An invasive social species that can harm trees and insects</p> |

THE LOOK-A-LIKES

| | |
|--|---|
| <p>Hoverflies Often called flower flies, these bee doppelgangers are usually in the syrphid fly family. They mimic bees and wasps to trick predators into thinking they can sting, but they cannot. Hoverflies are pollinators in their adult form and predators as larvae, mainly eating aphids.</p> | <p>Clearwing Moth Unlike most moths, clearwing moths are active during the day. This gives them good reason to mimic animals that could put up a fight, since they cannot. Some mimic bees and wasps, while others look like hummingbirds.</p> |
|--|---|

MOST Wonderful World of Pollinators

Try This!
Attach the pollen balls to the bee models on the wall. How many pollen balls can the native bee collect? What about the honeybee? Why?
When they think of a bee, most people imagine a black and yellow striped bumblebee. But honeybees aren't native to North America, and they are usually collected in commercial hives. The pollen they do collect is really taken into pouches on their legs called pollen baskets.
Unlike honeybees, many of the thousands of bee species native to our continent are social pollinators. They don't just visit flowers with a wider range of plants and animals than honeybees, but many are completely covered in tiny hairs that allow them to collect and spread more pollen.

Adults and children can stand in front of these wings and become butterflies - a perfect photo spot!

Colors can be updated as desired. A great branding opportunity.

Branded and QR-Coded PLANT TAGS



HIGH-QUALITY LONG-LASTING DURABLE ALUMINUM

Spriggly's works with local and national plant databases, such as Wildflower.org and the North Carolina Extension Gardener Plant Tool Box, to create interactive plant tags. These tags feature QR codes linked to individual identification pages for your visitors to learn more. Each QR code has space for your organization's logo or a symbol or your choice.

Designs without QR codes or written short links are available upon request.

Spriggly's provides the overall design, QR code creation, connection, and testing, along with print and shipping coordination **for orders of six or more.**

Standard Size

5" x 3" Aluminum Tag with Stake

6-49 tags.....\$27 each

50-99 tags.....\$25 each

100+ tags.....\$23 each

350+ tags.....\$21 each

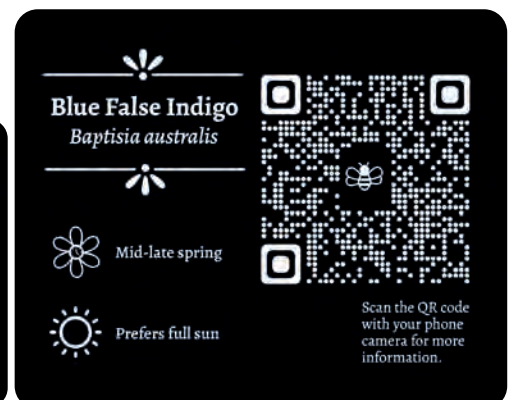
Depending on your site, plant tags can be made larger or smaller.

*Depending on the size, tags can include other information such as sun requirements, bloom time, pollinators supported, or clues to a scavenger hunt.

Shipping costs are not included in the pricing shown.

**Price changes with the size of the tags and level of design.*

Please contact info@sprigglys.com or **828.377.6168** to learn more and place your order.



Previously Developed EXHIBIT PIECES

Built to Order

The prices on the following pages are for the **specific designs** in the catalog, using the materials and sizes provided.

Spriggly's can **scale designs up-or-down** depending on the project goals, budget, and overall needs.

Exhibits can be fabricated in a **variety of materials and sizes to fit** the specifications of your space.

Designs originally made for certain regions **can be altered to feature the native species and nature topics** pertinent to your site.

Shipping costs are dependent on your location, the pieces ordered, and overall weight of the final packages. A rough estimate will be provided, however, the final cost is based upon current shipping rates set by third-party services.

CUSTOM COMMISSIONS

Need help with content and design to bring your idea to life?

Whether related to pollinators, plants, or another nature-based topic, we work with you and your team to create the perfect signage and exhibits for your space.

Spriggly's designs exhibits for all age groups and offers both indoor and outdoor exhibit options.

Please contact info@sprigglys.com or **828.377.6168** to learn more.

**CARPENTER BEES
LIVE HERE!**



**THIS IS A GOOD THING!
LEARN MORE INSIDE
THE TRAIN STATION**



Commissioned by the
Erie Zoo, in Erie, PA

The Lifiable Solitary BEE NESTING LOG

Interactive Exhibit

The Lifiable Solitary Bee Nesting Log is on display at the Milton J. Rubenstein Museum of Science & Technology in Syracuse, NY and the University of Michigan Extension Office, among other locations.



THE LIFECYCLE OF WOOD-NESTING BEES

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In that time, each female must find holes in dead wood that have already been made by other creatures.

She begins by collecting a ball of pollen that she places at the back of the hole. She then lays an egg on top of the pollen.

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Mason bees use mud, dirt, and rocks as their building materials.



Leafcutter bees use leaves to help build their nests.



Sometimes they even line the walls with leaves to help with moisture.

What happens to the eggs inside the hole?

The eggs hatch into a larva and eat all the pollen left behind by their mother. Pollen is full of protein and essential to growing bees.

After they finish the pollen, they spin a cocoon and undergo a complete metamorphosis, like a butterfly.

They then spend a long time as a "pupa", which is a protective state some insects enter while they wait to emerge at a later time, usually the following season.

Please note: the pieces included in this model are about three times the actual size of a nest found in real life.

This native bee nesting exhibit depicts the lifecycle of the two different wood-nesting bee genus groups, mason bees and leafcutter bees.

There are many species of each genus native across North America. In addition, there are species of mason and leafcutter bees native to much of the world, making this exhibit applicable for national and international use.



The exhibit features a **resin modeled log with an interactive top** that viewers can lift to explore the model and didactic signage inside. The nesting models can show either or both **mason and leafcutter bee nests in the egg stage, the larvae stage, and in the pupal stage.**

The nesting site models are made from **clay, mounted on a wooden base with high-pressure laminate signage featuring information** on the nesting lifecycle of solitary wood-nesting bees. Decorative wooden mushrooms are included as a part of the exhibit design.



The Lifiable Solitary BEE NESTING LOG

Details

Size: 35.5" x 13" x 9.75"

Materials: Resin, wood, clay, moss, epoxy, and 1/8" HPL

Base Cost: \$4,550 + S/H.

Mounting Option: \$75

A flat piece of finished wood can be affixed to the bottom of the exhibit for easy installation onto any surface.

Custom padded travel case:
\$300

Please contact info@sprigglys.com or **828.377.6168** to learn more and place your order.

Engaging and Interactive BUILD LIKE A SOLITARY BEE

Exhibit and Game



Native Bee
NEST MODEL &
BUILD LIKE A
SOLITARY BEE

Details

Size: Requires a minimum of 3' x 3' of table space for model and game, but ideally larger for two player stations

Materials: Wood, paint, spar urethane

Model Cost: \$1,200

Model Travel Case: \$150

Model Stand: \$100

Table Top Game: \$750

***Instructions:** Free PDF

*Print on a higher quality piece of signage for an additional fee.

The **larger than life nest model** and **Build Like a Bee game** puts solitary native bee nest education in the hands of the players. As seen in the nest model, the game is played by first gathering pollen, then balancing an egg on top, and finally closing off each egg into it's own room, or cell, using a wall.

Have a traveling educational program?

Exchange the tabletop version of *Build Like a Bee* for this compact travel set.

Build Like A Bee
EXHIBIT GAME
Travel Set

Details

Size: 14 x 10 x 6

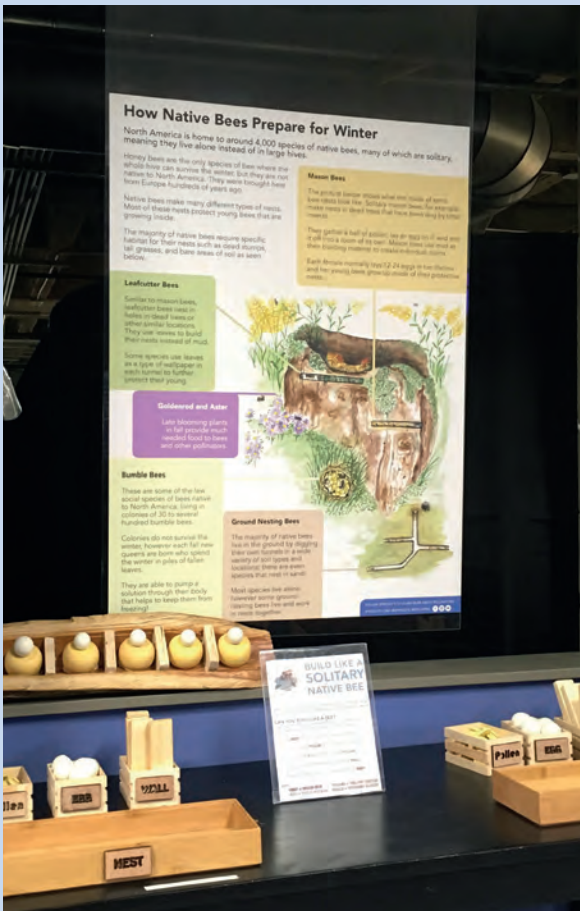
Materials: Wood, metal sign, vinyl signs

Cost: \$750 USD + S/H.



Make it a full exhibit with this dynamic piece of signage, discussing the various types of bees found in North America.

The sign explores how a stump becomes native bee habitat for wood and ground-nesting bees. With illustrated nests and detailed descriptions, **this sign partners perfectly with the larger than life nest model and Build Like a Bee game.**



Standard Sizes and Materials:
 36" X 48" restickable vinyl sign: \$300
 24" X 36" high-quality poster: \$150

This sign can be printed in varying sizes and materials depending on your site and budget.

This exhibit was first on display at the Asheville Museum of Science in 2018. **The entire exhibit, or pieces of this exhibit, are currently in use by multiple organizations** including Darke County Parks in Greenville, OH and Wild Ones in Winston-Salem, NC.

Please contact info@spriggly.com or **828.377.6168** to learn more and place your order.

How Native Bees Make Their Nests

North America is home to around 4,000 species of native bees, many of which are solitary, meaning they live alone instead of in large hives.

Mason Bees

Mason bees nest inside holes already made in dead wood. They use mud, dirt, and rocks as their building materials to create individual rooms for their eggs, giving them their name.

Most solitary bees make their nests as seen below: they first gather a ball of pollen and place it in the back of their tunnel. They lay an egg upon the pollen and seal it off into its own room using their building material of choice.

After the eggs hatch into a larva and eat the pollen, they spin a cocoon and go through a complete metamorphosis, coming out the following spring.

Leafcutter Bees

Similar to mason bees, leafcutter bees also nest in dead wood. These solitary bees use leaves to build their nests instead of mud.

Some species even use leaves as a type of wallpaper in each tunnel to further protect their young.

Plant Local Native Plants

Bees and other pollinators rely on native plants. Bees drink nectar as adults and collect pollen for their young to eat.

Bumble Bees

These are some of the few social species of bees native to North America, living in colonies of 30 to several hundred bumble bees.

Colonies do not survive the winter in temperate areas. Each fall new queens are born who spend the winter in piles of fallen leaves.

They are able to pump a solution through their body that helps to keep them from freezing!

Ground Nesting Bees

The majority of bees live in the ground by digging their own tunnels in a wide variety of soil types and locations; there are even species that nest in sand!

Most species live alone. Some ground nesting bees live and work in small nests together.

FOLLOW SPRIGGLY'S TO LEARN MORE ABOUT POLLINATORS:
SPRIGGLYS.COM | @SPRIGGLYS_BEESCAPING

THROUGH THE SEASONS

Solitary bee lifecycle nest model



The “Through the Seasons” Solitary Bee Life Cycle Nest shows the complete lifecycle in **one model**.

The interactive display comes with detachable bees that can be used as a part of a demonstration, showing how the **solitary bee flies off to a flower, comes back, and works on her tunnel**.

Through the Seasons
SOLITARY BEE
Life Cycle Nest Model

Details

Size: 14" W x 22" L

Materials: Wood, clay, plastic, and epoxy resin.

Base Cost: \$1,500 USD + S/H.

Padded travel case: \$150



This piece was originally created for BeetheChange.org in Weybridge, Vermont.



Additional Native Bee Exhibit ENHANCEMENTS

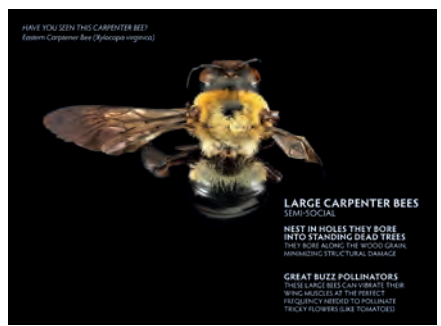
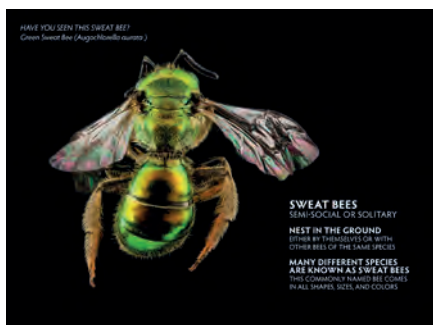
These Scientific Bee Identification Posters feature high definition images of common North American native bee species. The posters highlight additional pollinator and nesting information for each species.

Scientific Bee ID POSTERS

Details
Size: 9" W x 12" L
Materials: High Quality Prints or Re-Stickable and/or Permanent Stickable Vinyl options available.
Base Cost: High Quality Individual Prints \$50 each USD + S/H. Re-Stickable or Permanent Stickable Vinyl Prints \$75 USD each + S/H.



Each individual poster is a learning tool by itself. Use collectively as a full wall poster or as a set leading visitors through your space to a larger exhibit on native bees. These posters also make fantastic slides for presenting opportunities for educational trainings, pollinator



Please contact info@sprigglys.com or 828.377.6168 to learn more and place your order.

Additional Exhibit Signage

NATIVE BEES AND MORE

Each exhibit sign shown here can be printed in a variety of materials and sizes. Please contact info@spriggly.com or **828.377.6168** to get a quote for your space.

BEES ARE BEST AT FINDING FLOWERS



Many plants have developed flowers with combinations of sights, smells, and other signals that help them attract the animals they want. In fact, these plants are actively competing against each other in order to attract the most desirable pollinators. **Pollinators** are animals that visit flowering plants and carry pollen from one flower to another, helping plants make seeds. This is called pollination.

Sunlight is composed of many spectrums of light, including **ultraviolet light**. Unlike most humans, bees and other pollinators are able to see light in the ultraviolet spectrum. The majority of flowers can absorb or reflect ultraviolet light in different ways that create signals bees and other pollinators can read.

These signals, known as **floral markings**, are special colors and patterns on flowers. Some of these markings look very different to animals that can see in the ultraviolet spectrum. It is thought that these markings help pollinators find the nectar and pollen located inside of blooms. Each animal sees these signals differently from one another.

These pictures of *Monarda*, commonly known as bee balm, show a great example of how various parts of flowers might react to ultraviolet light.



This is a picture of *Monarda* under normal light.

This is a picture of *Monarda* under ultraviolet light. This incredible image is by photographer, Craig P. Burrows.



BEES ARE BEST AT FINDING FLOWERS

Bees and other pollinators rely on more than sight to find flowers. For example, many flowers produce scents that are designed to attract any nearby pollinators. Pollinators include bees, butterflies, flies, moths, beetles, birds or any animal that comes into contact with flowers, helping to spread pollen and aid in pollination.

These scents aren't made from a single spot on the flower - each flower has a specific arrangement of spots that produce scent depending on its species.

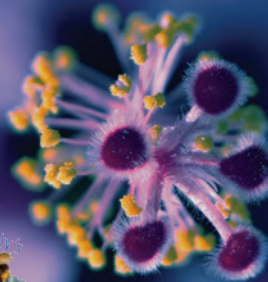
Bees and other pollinators are believed to be able to 'read' these scent patterns on each flower and use the patterns to help them find their favorite flowers. All pollinators have plants they prefer due to color, size, shape, and other features.



Flowers normally have a negative electrical charge due to special areas on their petals. These electrical charges create electrical fields, which surround any object that has an electrical charge.

Scientists believe that bees can tell a flower's type, location, and even if it has had another recent pollinator visitor simply by analyzing its electrical field.

In addition, the hairs on bees are attracted to these electrical fields, and point the way towards nearby flowers.



WHERE DO INSECTS HIDE WHEN IT IS COLD OUTSIDE?

Due to their small size and cold-blooded nature, insects are forced to quickly find shelter in the event of storms or cold weather. Winter is an especially tough time for insects due to scarce food and water combined with low temperatures.

While insects can be observed almost constantly during warm and sunny days in the spring and summer, in many parts of the world they disappear from sight in late fall and winter as they are forced to find shelter. Even though you don't see them, insects use several different types of habitats to shelter all around us while there is bad weather.

Leaving areas filled with these habitats is an easy way to foster populations of insects in your landscape.

UNDERNEATH LEAF LITTER

Some insects use the insulating power of leaves to help them survive during storms and cold weather.

Piles of fallen leaves are excellent at shielding insects from large raindrops and also protect from extreme cold. Even a layer of leaves as thin as 2 inches is enough to shelter many species.

A wide variety of wildlife take advantage of leaf piles, so make sure to leave your leaves whenever possible!

INSIDE SOIL UNDERGROUND

Many insects take refuge underground during bad weather.

Social insects band together to share heat and food to survive the winter, while some other insects dig down deep enough to avoid frosts. Some ground-dwelling insects construct unique houses that are designed to protect the occupants from flooding.

It is important to only use pesticides as a last resort to prevent harmful buildups in your soil.

UNDER LOGS AND ROCKS

Logs and rocks are important sources of shelter for insects during stormy and cold weather.

Many insects that are passing through use available logs and rocks in a landscape for shelter when needed in a pinch. Some insects also hide underneath the outer layer of bark on logs and trees.

If you look underneath a log or rock to see what is living underneath, make sure you put it back exactly the way it was.

WITHIN A FROZEN POND

Insects living near ponds, lakes, and other water sources swim deep underneath the surface and hold their breath or use gills to breathe while they wait out any storms in the area.

During the winter, these aquatic insects usually head straight to the bottom.

Many ponds and lakes are deep enough that the bottom never fully freezes, while streams and rivers usually avoid totally freezing because of their currents.

Look inside each box below to see what insects (and other creatures) you might find seeking shelter within that type of habitat.

FOLLOW SPRIGGLY'S TO LEARN MORE ABOUT POLLINATORS!
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 #SPRIGGLYSBEECAPING

HIDING IN PLAIN SIGHT! INSECTS SEEK SHELTER IN BAD WEATHER AND THE WINTER

ANTS

PREFERRED SHELTER: IN THE SOIL



Ants survive storms and the winter by huddling together and entering a semi-dormant state, almost like hibernation.

BUTTERFLIES

PREFERRED SHELTER: FALLEN LEAVES



Many North American butterflies spend the winter in a young, protected form, known as a pupa.

DAMSELFLIES

PREFERRED SHELTER: AT THE BOTTOM OF A POND, LAKE, OR STREAM



Some damselflies lay eggs that survive the winter on the banks of ponds, while others spend the cold months underwater in a young form known as a nymph.

BUMBLE BEES

PREFERRED SHELTER: FALLEN LEAVES



Young bumble bees curl up near the center of a leaf cluster by holding their chest and pumping a type of anti-freeze through their bodies!

BEETLES

PREFERRED SHELTER: IN THE SOIL



Many beetles spend the winter in a young, caterpillar-like form known as a grub.

MOTHS

PREFERRED SHELTER: FALLEN LEAVES AND LOGS



Many moths are expertly camouflaged to blend into their surroundings when taking shelter.

DRAGONFLIES

PREFERRED SHELTER: AT THE BOTTOM OF A POND, LAKE, OR STREAM



Dragonflies spend the winter as a young form known as a nymph, which lives and grows all winter long.

GRASSHOPPERS

PREFERRED SHELTER: UNDER ROCKS AND LOGS



Some grasshoppers lay eggs that survive through winter, while others enter a dormant state.

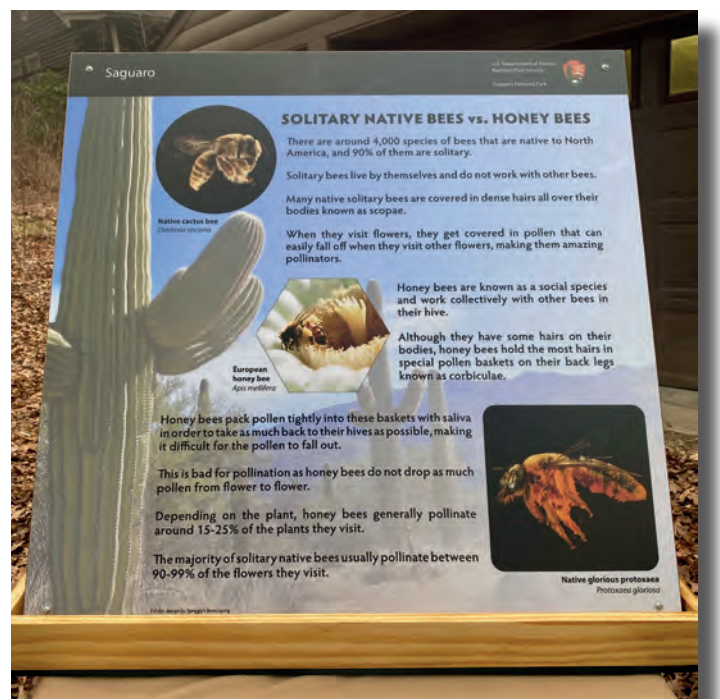
WASPS

PREFERRED SHELTER: FALLEN LEAVES



Most wasps spend the winter sheltered near locations where they lay their eggs.

Honey Bee vs. Solitary Native Bee EXHIBIT & GAME



This table-top design is perfect for permanent, temporary, and traveling exhibit needs.

The A-Frame signage and game come complete with a travel and storage case.

Pollen pieces made from wooden tokens and velcro are included.



EXHIBIT & GAME

Details

Size: 33" x 35"

Materials: Wood, HPL signage, velcro, enamel, tung oil, and spar urethane.

Cost: \$3,500 USD + S/H.

The other side of the A-Frame can be altered to feature the native pollinators and habitat in your region. Saguaro National Park was the first to commission the pictured design.

A version of this exhibit can be printed as large-scale wall decals as seen on page 3.

Pollen pieces made of plastic balls and velcro as seen on page 3, or full plush pollen pieces are also available upon request.

POLLINATORS • PLANTS • PRODUCE LIFT & FIND EXHIBIT

This "lift and find" exhibit puts exploration in the hands of the viewers as they **discover which of their favorite fruits and vegetables wouldn't be here without a pollinator!** This exhibit can be built for indoor or outdoor use.

A standing metal frame, wall mount, or wooden base can be purchased for an additional charge, or specs to build your own can be provided.

LIFT & FIND

Exhibit Details

Size: 48" x 24"

Materials: Wood and 3/4" HPL signage

Cost: \$3,500 USD + S/H

***Standing Metal Frame/Mount:**
\$500 + S/H

***Wooden Base:** \$300 + S/H

**Some assembly required*



LIFT & FIND POLLINATORS • PLANTS • PRODUCE



Pollinators are responsible for 1 out of every 3 bites of food we eat. Almost 90% of flowering plants depend on them for long-term success. Pollinators and other beneficial insects are critically important to our ecosystems.

| | | | | | |
|--|--|--|---|---|---|
| <p>Bush bean</p> <p>Many beans have attractive flowers, but they aren't really for the benefit of pollinators. Most beans are self-fertile and do not require pollination, but they do benefit from assistance!</p> | <p>Dill</p> <p>Dill has tiny shallow flowers that make easy landing pads for a variety of pollinators. Can you find the black swallowtail butterfly nearby?</p> | <p>Pumpkin</p> <p>Their large and showy tubular blooms attract many different kinds of pollinators. Pumpkins are especially enjoyed by the large bumbling garden friends below.</p> | <p>Basil</p> <p>The flowers of basil and other herbs are often trimmed to keep the flavor of the leaves strong. When they bloom, the flowers are loved by pollinators.</p> | <p>Mint</p> <p>Most mints have distinctly square stems. Their flowers offer pollen and nectar to a wide range of pollinators, especially those with short tongues.</p> | <p>Watermelon</p> <p>Most watermelons produce male and female flowers on the same plant, which is called monoecious. This makes pollination easier than it is for many other plants.</p> |
| <p>Carpenter bees</p> <p>As the largest bees in North America, they specialize in buzz pollination, vibrating their wings at specific frequencies in order to help shake pollen from stubborn flowers.</p> | <p>Black Swallowtails</p> <p>Black Swallowtail and Azure Swallowtail butterflies lay their eggs on dill flowers. Their caterpillars use chemicals from the plant to make themselves taste bad to predators.</p> | <p>Bumble bees</p> <p>Large and fuzzy, these pollinators love to crawl inside pumpkin blossoms and wiggle all around! They get covered in pollen from head to toe.</p> | <p>Hummingbird moths</p> <p>Hummingbird moths are active during the day and night. They mimic the colors of a hummingbird to help ward off predators and if that doesn't work, they can fly at speeds of over 10 miles per hour!</p> | <p>Wasps</p> <p>Wasps are fantastic pest pollinators, as they only visit flowers shallow enough for their small tongues. They are also amazing garden predators!</p> | <p>Sweet bees</p> <p>These ground-nesting bees have bright iridescent colors that are believed to help serve as a form of camouflage, hiding them from hungry predators.</p> |
| <p>Squash bees</p> <p>Specialists at squash pollination, females make nests right near the base of their favorite plants. Males also pollinate by dancing in blossoms to attract a mate.</p> | <p>Digger bees</p> <p>Digger bees nest in the soil, where they lay alone and gather food for their young. They appreciate bare areas of soil to build nests and are most active in summer.</p> | <p>Hoverflies</p> <p>Hoverflies and many other types of flies rely on nectar from flowers as adults. Hoverfly larvae are carnivorous, eating aphids and other pests.</p> | <p>Leafcutter bees</p> <p>Summer bees like leafcutter bees are the primary pollinators for cucumbers. These fuzzy bees keep their buzz in the air when they visit flowers.</p> | <p>Ants</p> <p>Ants help pollinate and assist with fertilization as they move in and around plants like Okra. They also disperse 50% of the world's seeds.</p> | <p>Beetles</p> <p>Large and clumsy fliers, beetles love easy-to-access landing pads like those of sunflowers. Evolutionarily, beetles are believed to be the first pollinators.</p> |
| <p>Squash</p> <p>Squash are believed to be some of the first crops grown by humans. Not only is the fruit edible, squash blossoms can be eaten cooked or raw.</p> | <p>Marigold</p> <p>Marigolds produce strong scents that work wonders at repelling garden pests. Plant them between other plants as "companion plants" to help ward off pests.</p> | <p>Radish</p> <p>The entire radish plant is edible from the foliage to the spiky seed pods. Radish flowers are also pollinator magnets if left to their own devices.</p> | <p>Cucumber</p> <p>Cucumber flowers are only open for one day and need help from pollinators to grow properly. Some cucumbers can grow over 2 feet long!</p> | <p>Okra</p> <p>Like beans, most okra is self-pollinating, although their beautiful flowers still attract pollinators to help in the process. Their blossoms only last for one day.</p> | <p>Sunflower</p> <p>While they look like one huge flower, the inside dishes of sunflowers are actually made up of hundreds of tiny flowers called florets.</p> |

Native plant focused POLLINATOR GARDENS

Enhance outdoor experiences



Pollinator gardens are a fantastic addition to any outdoor space and partner with almost any Spriggly's exhibit. **Let our native plant horticulturist and landscape designer create the perfect garden design for your space.** Our designs feature a diversity of native plants to your region that bloom throughout the growing season and support a wide range of pollinators.

After 1-3 years, native plant gardens are well established and require minimal to no maintenance depending on the site's aesthetic needs.



Having drainage issues?

Pollinator gardens can be easily transformed into rain gardens as seen below.



Our designs are rendered in 2D and 3D, along with an option for a video preview. Design costs are priced per project. Please connect with info@sprigglys.com or 828.377.6168 for an estimate.

WHY CHOOSE SPRIGGLY'S



Spriggly's Beescaping is a **nature education and habitat restoration business** from Western North Carolina. Spriggly's has **dedicated their business to supporting pollinators and local ecosystems.**

Enhance learning opportunities.
Promote conservation awareness.
Display commitment to the environment.

Spriggly's Beescaping creates **nature-based exhibits and informational signage**, often with a special focus on native pollinators, native plants, and native ecosystems.

Through the use of different materials, along with varying shapes and sizes, **our project development process meets the specific needs of each client's space and budget.**

Discounted non-profit pricing is available upon request.



Need assistance, but have your own team?

If your team has its own design and fabrication process but are interested in idea generation and brainstorming, Spriggly's offers in-person and virtual consultations. We also write educational content for your team to use as desired in your own designs.

WHAT WE OFFER

- Indoor/outdoor interpretive signage
- Interactive physical exhibit models
- QR code plant identification tags
- Dynamic website information pages
- Touchscreen signage
- Content and curriculum development
- Takeaway materials
- Activities and games
- Native plant pollinator gardens



WHAT OUR CLIENTS SAY

"We were thrilled to partner with Spriggly's Beescaping to create our Wonderful World of Pollinators exhibit. From initial design to delivery and even ongoing maintenance, Jill and Brannen were there every step of the way, and we couldn't be happier with our larger-than-life butterfly photo spot, native bee wall game, and nest model!"

- Emily Stewart, Milton J. Rubenstein Museum of Science & Technology | Syracuse, NY

"The exhibit is stunning. Thank you so much for it!"

- Elle Gray, Great Explorations Children's Museum | Tampa, FL

"Through their innovative approach and collaborative spirit, Spriggly's not only enriched Kaleideum's pollinator garden but has also inspired visitors to appreciate and protect our natural world. Their dedication to environmental stewardship serves as a shining example of how businesses can make a positive impact on both local communities and the planet at large."

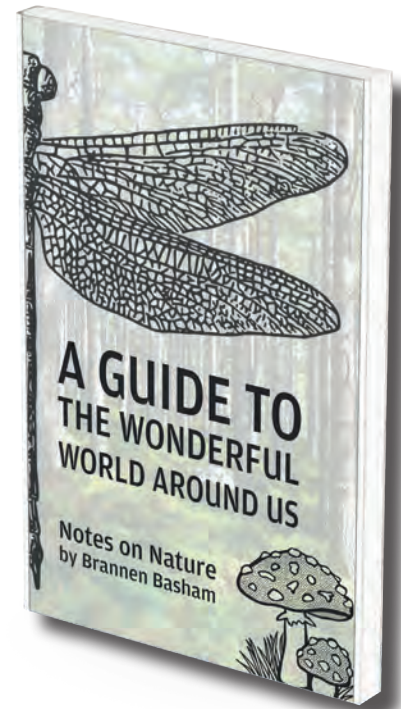
- Leigh Ann Woodruff, Kaleideum Museum | Winston-Salem, NC

Our Books



1st-3rd readers

Our children's book follows a mason bee as she searches for a new home, meeting many pollinator friends along the way. This book compliments any of Spriggly's native bee exhibits. A five lesson curriculum kit is available for this book as well.



8th+ readers

Our non-fiction book of articles is broken into the following chapters: The Natural World, Fantastic Plants, Our Animal Friends, Strictly Insects (Mostly Pollinators), Human Innovation & Impact, and A Look to the Future.

Learn more about both books on the following pages.

Contact

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@sprigglys_beescaping





Spriggly's Beescaping

BUZZ WORTHY



Just then, a beautiful butterfly passed by with incredible colors on its wings.

Pollinator Packed Curriculum Kit!

Connecting to Spriggly's children's book, ***Finding Home: A Story of a Mason Bee***, this **cross-curricular kit** is perfect for **1st-3rd grade** students.

Enjoy **five lessons**, with **extension activities** based on education level.



Finding Home shows readers an inside look at the lives of six beneficial native creatures through an engaging and educational tale of a mason bee's search for a new home.

WHAT'S INCLUDED?

- **Flash-drive* with curriculum kit ready to print:** features detailed lesson plans, activity sheets, flash cards, bee hotel instructions, pollinator garden guide, and other teaching tools.
- **Hardcover copy of *Finding Home***
- Access to the ***Finding Home* online kid's course**, with an **interactive book reading** and **nature video lessons**
- A sunflower seed bomb four pack

*No redistribution allowed beyond repeat personal or classroom usage. Long-lasting printed curriculum booklets and thick laminated flashcards are available upon request. Connect with info@sprigglys.com for details.

The Animals You Meet!
(in order of appearance)

Mason Bee
 A solitary bee that lives alone in small tunnels in wood, especially in dead trees and branches. Mason bees use mud and dry rocks to create their nests, much like human masons, who build things using stone. They are fantastic pollinators.

Bumble Bee
 Large, fuzzy bees that live in small colonies of around 50-100 members, normally on the base of grass tufts or in abandoned bird or mouse nests. Bumble bees can shake their bodies on they visit flowers. This is called buzz pollination.

Ant
 Ants are social insects that live in large colonies, usually underground. Ants are important members of a landscape as they help loosen soil and recycle nutrients. Ants also disperse the seeds of many plants, carrying them far and wide. Some seeds even have special structures on them that help attract ants to spread them.



Monarch Caterpillar
 A caterpillar is the young form of butterflies and moths. Caterpillars are constantly eating in order to store enough energy to eventually change into their adult forms. Most caterpillars eat leaves, and many are able to use chemicals found in their favorite leaves to make themselves less attractive to predators.

Monarch Butterfly
 The colorful, adult form of a variety of caterpillars commonly seen in landscapes around the world. Butterflies use their large wings to glide through the air and rely on the nectar of flowers for energy throughout the day. Butterflies use their extremely long tongues to access flowers.

Hummingbird
 A unique type of bird that feeds on the nectar from flowers, rather than insects and/or seeds like most other birds. Hummingbirds use their long tongues to access flowers and require so much energy that they have to constantly keep drinking nectar throughout the day in order to keep their bodies full.



Spriggly's Beescaping

GARDENING FOR THE PLANET

VIDEO COURSE SERIES



Expand your knowledge of the ecosystems around you and share what you've learned with family, friends, and students!

Enjoy 16+ hours of engaging video content and become an expert on supporting pollinators and your local environment.

This course series and associated book are perfect for adult learners and applicable to student learners as low as 6th grade.

COURSES INCLUDED

- Save the Bees. All the Bees
- Wonderful Wasps: Predators and Pollinators
- Beautiful Butterflies and Moths
- Beyond Beneficial Wildlife: Ants, Flies, Beetles, and more
- Choose Native Plants: Size, Shape, and Scope Matters
- Dangers Saturating Our World
- Restore, Rebuild Rewind: Nature-Focused Landscaping
- Invasive vs. Non-Native vs. Native Plants
- Tool Time: Pruning, Equipment, and Techniques
- Integrated Pest Management + IPM Plans
- Controlling Drainage + Rain Gardens as Pollinator Gardens
- Moving Social Wasp Nests
- Companion Plantings and Cover Crops
- Medicinal Gardens as Pollinator Gardens
- Bonus Course for Kid's with Interactive Book Reading

This video course series partners with our non-fiction softcover book:

A Guide to the Wonderful World Around Us: Notes on Nature

From mushrooms to the moon, take a journey throughout planet Earth and beyond. The book explores 60 nature topics broken into six chapters: The Natural World, Fantastic Plants, Our Animal Friends, Strictly Insects (Mostly Pollinators), Human Innovation & Impact, and A Look to the Future.

