

Raindrops

keep fallin' on my bed

Plant a garden that attracts wildlife and protects animals downstream

text by RUTHANNE JOHNSON ■ illustrations by ROBERT HYNES

In sunbaked Tucson, Ariz., it's not unusual for summer temperatures to soar above 100. But Brad Lancaster's yard is thriving. Native vines and chuparosa shrubs provide cover for Gambel's quail, horned lizards, and gopher snakes. Cactus wrens sing in the paloverde trees and cholla cacti. Curve-billed thrashers forage for berries and insects. And Gila woodpeckers perch amid the velvet mesquite and desert ironwood trees.

Lancaster has cultivated this desert oasis by planting rain gardens on his 1/8-acre property. During a storm, gutters and natural land contours direct rainwater to the shallow saucer-shaped depressions forming each garden's basin. The water seeps into the soil via channels created by soil microbes and the deep roots of the native plants. Pollutants are filtered out in the process, and the underground aquifer is replenished with cool, clean water that slowly streams back into local waterways.

This natural plumbing system is far superior to the manmade networks in our suburbs and cities, where rainwater gushes off parking lots, roads, and saturated lawns, picking up heavy metals, fertilizers, and other pollutants on its way to storm drains and, eventually, to streams, rivers, and lakes. The runoff's sheer volume and warmer temperatures erode banks, cause flooding, and destroy aquatic life.

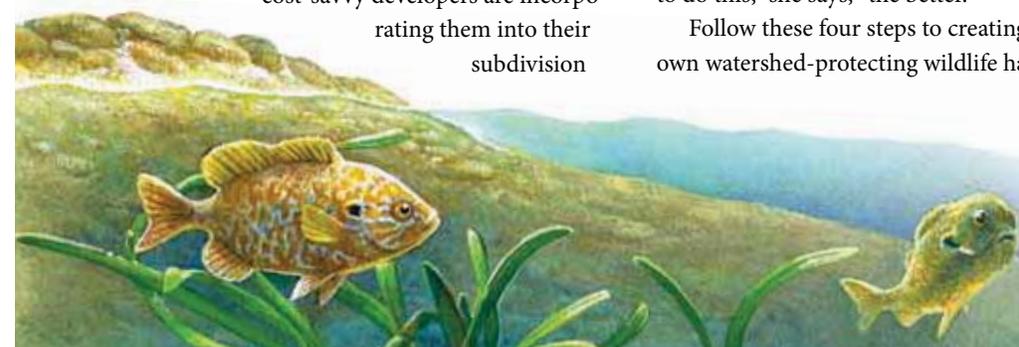
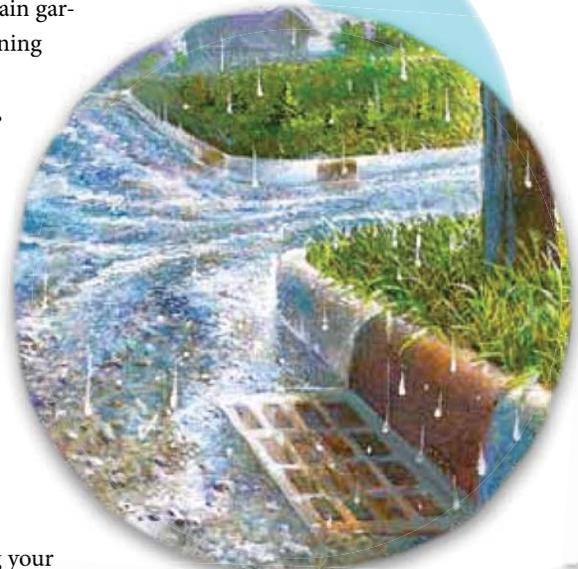
As more people work to conserve water, improve storm water management, and clean up waterways, rain gardens are surging in popularity. Cities across the country are promoting them as part of watershed initiatives, cost-savvy developers are incorporating them into their subdivision

designs, and homeowners like Lancaster are recognizing the benefits of replacing high maintenance lawns with low maintenance wildlife havens that also protect animals downstream.

"We have all we need in our communities to turn our streets into a naturally shaded, freely irrigated, flood-controlling, food-producing greenbelt," says Lancaster, who shares tips in his book *Rainwater Harvesting for Drylands and Beyond* and at harvestingrainwater.com. "Instead of directing the stormwater into the storm drain, we direct it to the landscape. The storm drains are really there for when we have those biblical rain events. But it only takes the overflow, instead of taking *all* the flow."

Lancaster estimates that his eight carefully planned rain gardens harvest tens of thousands of gallons a year. But even a modest rain garden can make a difference. After learning about the environmental benefits of rain gardens at a library presentation, Susan Griffith transformed a small muddy patch in her Barrington, Ill., backyard into a pear-shaped garden filled with sedges and grasses, cardinal flowers, great blue lobelia, woodland phlox, Jacob's ladder, and goldenrod. She has already expanded the garden once and plans to help build a second on her neighbor's property. "The more people we can encourage to do this," she says, "the better."

Follow these four steps to creating your own watershed-protecting wildlife haven.



STEP 1: HARNESS THE FLOW

To find the perfect location for your rain garden, look for depressions or flat surfaces where your property's runoff is flowing. "Is it coming off the roof? Is it sheeting off the slope of the back landscape? Does it flow towards the street or towards the house?" says David Hymel of Rain Dog Designs in Seattle, who has installed more than 150 rain gardens as part of Washington State University's campaign to help clean up Puget Sound.

If runoff doesn't naturally flow to your preferred location, channel it via gutters, pipes, curb openings, or grassy swales. Make sure the garden is at least 10 feet from your house and the right size for the amount of runoff: about 10 to 20 percent of the total area where water is coming from.

STEP 2: DIG IT, BABY!

Rain gardens aren't ponds, and standing water should be absorbed within three days to prevent mosquito breeding. Sandy soils percolate well, while compacted soils such as clay don't. To determine your soil's permeability, dig several 6-inch-deep holes and fill them with water. If water remains after 24 hours, you'll need to amend the soil to increase infiltration. Excavate about 2 feet of soil, and replace it with about 18 inches of a 60/40 mixture of sand and compost. (As with any digging, call local utilities before breaking ground.)

"The 6 [remaining] inches is your ponding depth," Hymel says. "The water comes in and fills up and then filters into the soil."

If your soil is particularly compacted, landscape designer Brad Lancaster recommends building up a "living sponge" with kitchen compost, tree prunings, and grass clippings. "The added benefit of that organic matter is that it increases the rate at which water infiltrates the soil, and you don't have puddles or mosquitoes," he says. "And it decreases the rate at which you lose water to evaporation. ... You are creating a living system where roots continue to grow, and you are creating habitat for more soil microorganisms that burrow through the soil and make more channels for the water to infiltrate."

STEP 3: SOW THE SEEDS

Next, it's time to get busy planting. Native plants that tolerate wet and dry conditions work best, given their channel-creating deep roots. They are also hardier and provide habitat and food for wildlife.

For inspiration, Lancaster recommends putting on your walking shoes. "The best thing you can do is to just take a hike and see what plants naturally grow without any care from people in similar microclimates to yours. ... If you plant those same plants in a rain garden, they will thrive." For help

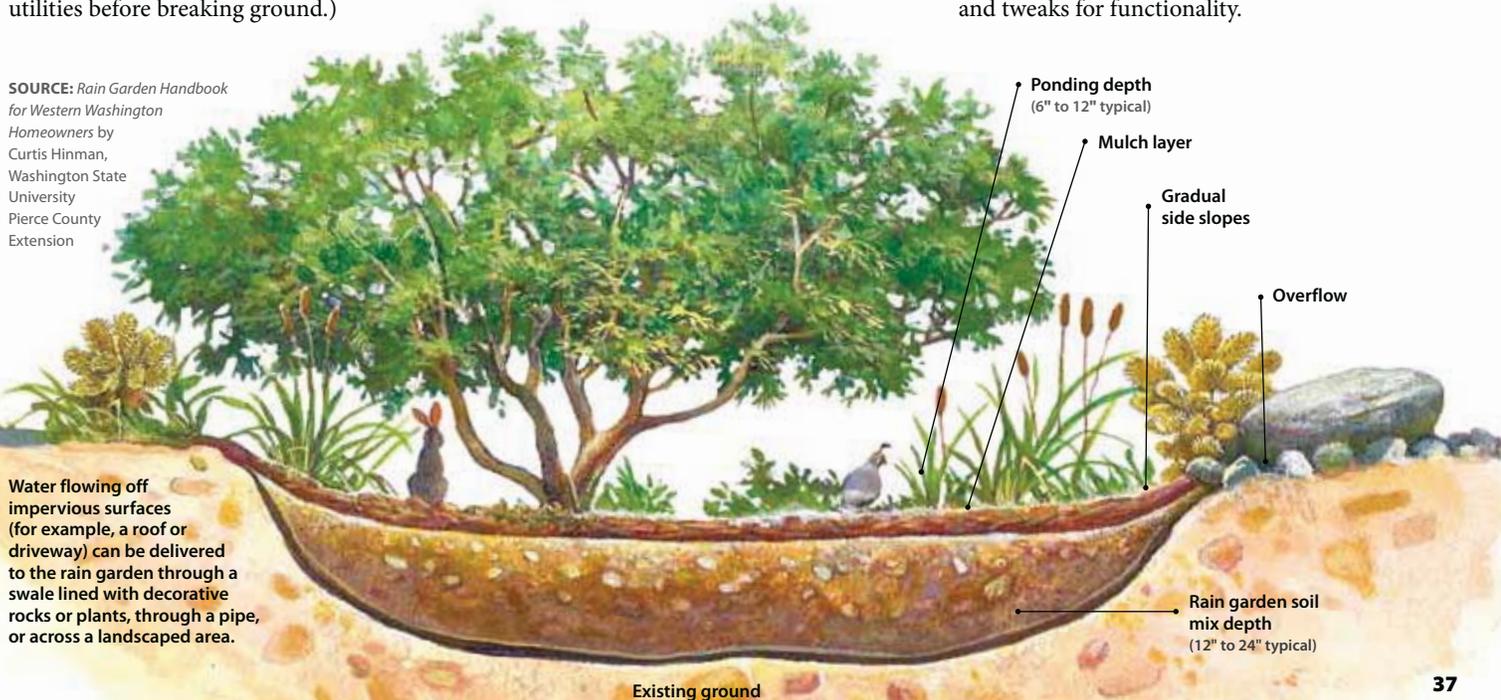
identifying plants you find, take photos to a native plant nursery or university cooperative extension.

Your rain garden should consist of three zones, with plants that can tolerate periods of standing water in the inner zone and species that thrive in drier conditions in the outer two. Rain Dog Designs co-owner Marilyn Jacobs plants red and yellow twig dogwood, Douglas iris, and blue medusa rush in the wet zone. In the drier zones, she likes columbines for attracting hummingbirds and creeping snowberry for wintertime wildlife food. For year-round color, she suggests plants that bloom in different seasons and provide a variety of textures.

STEP 4: LET IT BE

Now comes the easy—and rewarding—part: watching the fruits of your labor flourish. "Rain gardens keep getting better with time," says Patsy Mortimer, coordinator for the Flint Creek Watershed Partnership rain garden initiative in Illinois. "When you first plant the native vegetation, they don't have much of a root system. It takes time for that root system to grow down and become effective in terms of channeling water and breaking up the soils." Once plants are established, they require little maintenance besides occasional weed patrols, mulch reapplication, and tweaks for functionality.

SOURCE: *Rain Garden Handbook for Western Washington Homeowners* by Curtis Hinman, Washington State University Pierce County Extension



Water flowing off impervious surfaces (for example, a roof or driveway) can be delivered to the rain garden through a swale lined with decorative rocks or plants, through a pipe, or across a landscaped area.

Existing ground



Lunch Box Magic

Blogger mom transforms the brown bag experience

After adopting a meat-free diet as a teenager, Jennifer McCann packed peanut butter sandwiches almost every day for lunch. Years later and with a family of her own, she wanted a more varied experience for her son.

On his first day of school, McCann packed vegetable sushi in a colorful bento-style lunch container she'd discovered online. It was her gateway into Japanese bento food art—dishes designed after “everything from cute animals, trucks, and flowers to detailed portraits of favorite TV characters.”

Inspired, she began creating her own designs: fish-shaped tofu sticks and mini pizzas; sunflower-esque English muffins alongside honeybee-shaped cookies; a vegan “twinkie” of cornbread and veggie dog; mummy calzones and baked apple heads for Halloween; and a heart beet salad for Valentine’s Day. Her tomato-hating son began slurping roasted tomato basil soup and gobbling his first salads, drizzled with “Asian miracle dressing.” His classmates salivated whenever he brought tofu-based fondue and veggie dippers to school.

In 2005, McCann started the Vegan Lunch Box blog, which soon attracted a large following. Encouraged by fans, she wrote two cookbooks, *Vegan Lunch Box* and *Vegan Lunch Box Around the World*. She hopes the recipes—such as these popcorn balls featuring foods native to North America—will inspire parents to get creative in the kitchen: “Making healthy foods look colorful, fun, and exciting can go a long way towards getting kids to give them a try.”

— Ruthanne Johnson

▲ **TO RECEIVE A FREE** weekly Meatless Monday text with a link to a mobile-friendly recipe, text TASTY to 30644. For more recipes, visit humanesociety.org/recipes.

NATIVE BLEND POPCORN BALLS

SERVES 12

- 10 cups popcorn** (½ cup kernels popped in ¼ cup corn or canola oil)
- ⅓ cup roasted**, unsalted pumpkin seeds
- ⅓ cup roasted**, unsalted sunflower seeds
- ⅓ cup dried blueberries**
- ⅓ cup dried cranberries**
- ¼ cup brown rice syrup**
- 1 cup packed light brown sugar**
- ½ teaspoon salt**
- ¼ cup water**
- Margarine or oil for hands**

1. Place the popped popcorn in a large mixing bowl and remove any unpopped kernels. Add the seeds and fruit.

2. Combine the brown rice syrup, brown sugar, salt, and water in a small saucepan. Cook over medium heat, stirring constantly, until the mixture boils across the entire surface. Stop stirring and adjust the heat if necessary to maintain this constant boil without boiling over.

3. For soft, somewhat gooey popcorn balls, boil for 8 to 10 minutes (240° F on a candy thermometer). For hard, less chewy popcorn balls that crackle when you crunch into them, boil for up to 15 minutes (250° F on a candy thermometer).

4. Pour the sugar mixture evenly over the popcorn, stirring constantly until coated and mixing in any sunflower seeds that fall to the bottom. Put some margarine or oil on your hands and scoop up large handfuls of the mixture, pressing firmly to shape into balls.

5. Work quickly before the mixture has a chance to cool. If the mixture gets too firm to shape, place it in a 300° F oven for 1 to 2 minutes to soften.

AMANDA HEARST

Three years ago, philanthropist and fashion editor Amanda Hearst purchased a pup from a shop in Manhattan's West Village. "The pet store had given me his birth certificate and paper with his family tree, assuring me that he was ... from a breeder who treated his animals kindly."

When Hearst later found out that her beloved Finnegan came from a puppy mill, she was shocked—and determined to take action. Fortunately, the great-granddaughter of William Randolph Hearst counts some of New York's most influential young animal lovers among her friends. People like Georgina Bloomberg, Annie Churchill, Kick Kennedy, and Lorenzo Borghese were happy to join her Friends of Finn charity, which raises money for puppy mill awareness. Hearst has also been a key supporter of the annual To the Rescue! Gala benefiting The HSUS's Animal Rescue Team; this year, she and Bloomberg will chair the Nov. 2 event in New York.



Hearst visits an emergency shelter for puppy mill dogs.

In this edited interview with associate editor Arna Cohen, Hearst describes how she combined philanthropy and friendship into a powerful force for change.

How did you find out about Finn's background?

I flew down to Mississippi to visit animals rescued [by The HSUS] from a horrible puppy mill. It was difficult and challenging, yet enormously rewarding. After the rescue, a thought crossed my mind: Was Finn from one of these puppy mills? After seeing all those little dogs in cages, with looks of fear and anxiety in their eyes, with their hair knotted and their bodies weak and emaciated, I had to know the truth.

So, with the help of The HSUS, we did some research. The news hit me like a bullet in the chest: Finn had come from a puppy mill that had countless citations and had, at one particularly low point, housed 900 dogs in the same vicinity. It was then that Friends of Finn was born.

How did you form Friends of Finn?

I sought out friends who I knew for a fact loved animals. I wanted people who would be actively involved. The first year we raised about \$160,000. The second year we raised \$185,000. I've worked with a lot of charities and never in my life seen something like this where out of the gate we make so much money.

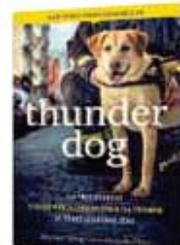
What is Friends of Finn doing now?

Georgina [Bloomberg] now is an honorary member of The HSUS's Equine Leadership Council. That was a result of her involvement with Friends of Finn. We've thrown a few fundraisers. One was at the Stella McCartney store. We're thinking of doing something at Dylan's Candy Bar because Dylan [Lauren] is involved. We have a lot of ideas on the horizon.

▶ **TO WATCH** a video of the emergency shelter visit that set Friends of Finn in motion, go to humanesociety.org/allanimals.

BOOK SHELF

Three recent books offer powerful tributes to canine courage on one of the darkest days in U.S. history. Stuck on the 78th floor of Tower One, a blind man faced the chaos of the World Trade Center on Sept. 11, 2011. But thanks to the unwavering trust between Michael Hingson and his guide dog Roselle, there were two fewer victims that day. In *Thunder Dog* (with co-author Susy Flory), Hingson recounts their escape down 1,463 stairs and subsequent flight through the streets of Manhattan. Interspersed with vivid descriptions of the day's terror are Hingson's reflections on life with the dogs who have helped show him the way.



Dog Heroes of September 11th, by Nona Kilgore Bauer, profiles 80 dog-and-handler teams that searched the crash sites for human remains, bringing closure to victims' families. Photographs of dogs balancing on concrete beams and traversing shifting mountains of rubble reveal the dangerous working conditions, while interviews with the handlers detail the dogs' tireless dedication to the task and the comfort they brought to distraught rescue workers.



Retrieved, by photographer Charlotte Dumas, visits 15 of the surviving search dogs a decade after their service. Portraits show gray-muzzled seniors soaking up their golden years, enjoying activities like swimming, agility practice, car rides—and a much-deserved rest on a soft bed.

