

## 10 Tips to Build Your Own Backyard Wetland

By Kathlyn Franco

Building wetlands is a great way to help your local wildlife. 43% of the species listed as threatened or endangered by the U.S. Fish and Wildlife Service are wetland dependent species. Here are some tips to help you get started building wetlands:

1) Survey your property and find flat ground: 6% slope or less is ideal.

2) Find dry ground. Make sure your flat ground is dry without reeds or rushes, as building on pre-existing wetlands can require special permits.

3) Choose your construction technique.

There are three ways to build a wetland: (1) utilize pre-existing ground water; (2) make use of high-clay soil to retain surface water coming from rain and run-off; or (3) use a plastic liner to hold water. Here's how to determine which technique you'll use. Dig a hole at least 3 feet deep and cover it with a board. If the next day your hole is filled with water, you'll be able to build your wetland simply by expanding the hole into a wetland; the pre-existing groundwater will fill the hole within a few hours. If no water fills your test hole, grab a handful of soil that is underneath the topsoil and add water. Mix the soil and water until it is a moist ball, and then use your thumb and index finger to squeeze out a 2" thin ribbon of soil. If it breaks before 2", there is not enough clay to use the surface water technique. You'll need to use a plastic liner. If you succeeded in making a 2" thin ribbon then you can compact the clay down, which will make the soil impervious and enable it to fill when the next rains come.

4) Only use a plastic liner that is aquatic safe. Most liners on the market are treated with algaecides or fungicides that can kill wetland wildlife. Cover your liner

with 6" of topsoil so it stays in place and out of sight.

5) If the wetland is too large to dig by hand, hire a machine operator and contract them by the hour. It costs about 3 times more to pay by the job.

6) To encourage the most plant and animal diversity, aim for water depths around 18-24 inches. Any deeper may attract fish and predators of frogs.

7) To create naturally appearing wetlands that require little to no maintenance create gradual slopes leading into the wetland (less than 10% grade).

8) After creating the wetland, spread native seeds and weed-free straw to prevent erosion and exclude invasive plants.

9) To get the best wildlife response, make a "messy" wetland. Create mounds of soil varying in depths, some that emerge out of the wetland. Place branches, logs, and twigs in your wetland. Plants and wildlife will thrive in the variety of microhabitats.

10) Get trained experts involved. Having the involvement of experienced biologists or organizations like SAVE THE FROGS! can save you time, money, and frustration, and ensure your design will be wildlife-friendly.

*SAVE THE FROGS!  
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Kathlyn Franco writes  
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tips from Los Angeles  
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to attend one of our SAVE THE FROGS!  
Wetland Construction Workshops in the  
San Francisco Bay Area November 30<sup>th</sup> to  
December 8<sup>th</sup>, 2015. You can learn more at:  
[www.savethefrogs.com/wetlands](http://www.savethefrogs.com/wetlands)*

