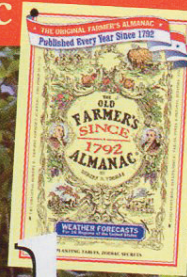


The Old Farmer's Almanac

ALL-SEASONS Garden Guide

2009 ANNUAL EDITION
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**EASY,
AFFORDABLE
IDEAS** for

- vegetables
- peonies
- using less water

plus

- small plots
- fiesta fixin's
- sweet peas
- "green" lawns

AND MORE!



A photograph of a small, modern wooden house with a green roof. The house is surrounded by a lush garden with various plants, flowers, and trees. The scene is bright and sunny, with green foliage dominating the background and foreground. The house has large windows and a gabled roof. The garden in the foreground is filled with purple and pink flowers, and a stone path leads towards the house.

UP ON THE ROOF

**Gardening reaches
new heights.**

by Lisa Palmer

You may have more garden area than you realize. The roof—on a shed, porch, garage, even doghouse—is the newest place for a plot.

“Green roofs have captured people’s imaginations,” says Dave Hampton, an architect at Echo Studio in Chicago, Illinois. That’s “green” as in ecological and environmentally friendly as well as full of foliage.

The boom in residential roof gardens is likely an effect of the Energy Policy Act of 2005, which mandates that new buildings have ways to keep storm water from ending up in

—background photo, Marianne Majerus

ornamentals

wastewater treatment plants. Since its inception, the number of eco-roof projects for commercial buildings has grown exponentially, and the concept is now being adapted by home owners.

The building industry recognizes two roof garden styles. Extensive roof gardens are best suited for residential stick-built construction. With relatively shallow beds, at 2 to 8 inches deep, and appropriately small plants, an extensive roof garden adds visual appeal and novelty to a property. Intensive roof gardens are built on flat-roof buildings in urban settings. With beds that are a foot or more in depth; larger plantings, including trees and shrubs; and walkways that create a parklike setting, these horticultural havens are designed for recreational and social use. (Think walk-out patio, says Hampton.)

—Rob Cardillo



ornamentals

▶ This lush green roof in Norfolk, Virginia, soaks up water and prevents runoff.

▶ Cottage-style plantings and furnishings evoke the countryside on this roof in London, England.



—Marinna Mejias

▶ Walkways create a parklike setting on this roof in lower Manhattan.

WHY GROW ON HIGH?

A roof garden helps to . . .

- ▶ insulate the building from extreme temperatures and help in cooling the building in summer
- ▶ aid in retaining rainfall and reducing runoff
- ▶ reduce sun damage to the roof, potentially lengthening its life
- ▶ create habitats for birds and butterflies

—Simon Bird/Birdworks



continued

ROOFTOP REALITIES

Before you begin heaving bags of soil over your head, check your roof's pitch; 30 degrees is the tip-

ping point. A roof angle of less than that is ideal; a greater pitch will be too steep to hold soil and plants in place. Whether you are retrofitting an existing roof or planning to install a green

roof yourself, get expert advice. Contact a structural engineer or a seasoned roofing contractor to . . .

- determine how much weight your roof can hold
- calculate the moisture load (experts say that 60 to 100 percent of rainfall is absorbed by a green roof)
- assess the foundation to identify any modifications that may be needed
- calculate the snow load, if the roof is in a snow belt

You should be prepared to discuss the types of plantings that you want to install and the type and depth of the soil required. (For ideas, see www.green-roofplants.com.) Your roofing expert may be able to suggest a landscaper or nursery person in your area with knowledge of rooftop gardening.

Remember that rooftop gardens are not carefree beds. Consider how you will water, weed, prune, and feed. You'll need a ladder such as the type used for orchard-pruning, which has a triangular shape and a wide base for support. Also, plan to have some help when you plant. Paul Miskovsky, a landscaper in Falmouth, Massachusetts, uses the assembly line method: "We have two guys on the roof, one guy on top of the ladder, one guy at the bottom of ladder, and one guy passing the plants."

◀ *Sedum thrives in this roof garden at the 2007 Chelsea Flower Show, London.*

BED BASICS

Any roof garden requires four basic layers:

- ▶ a waterproofing membrane, which encases the roof and acts as a root barrier
- ▶ a drainage layer (granular material and, sometimes, filter fabric)
- ▶ a growing medium (this ranges in depth and density, depending on the pitch of the roof and the choice of plants)
- ▶ plants

▶ *Plantings on a doghouse roof can be easily maintained and may help to keep Fido a little cooler.*



continued



ON A SUNNY ROOF

Sedums rule in sunny roof gardens. Their shallow root structure and high tolerance for extreme temperature and moisture levels make them ideal for sunny roofs that can hold 2 to 4 inches of soil. "You get a mosaic effect when you combine three to five different types of matlike sedums, which have interesting colors and textures year-round," says Karen Howard, architect and landscape designer at Howard Garden Designs in West Newton, Massachusetts. Some of her favorite low-growing sedums include *Sedum reflexum* 'Angelina', with bright-gold, needlelike foliage and 1/4-inch yellow flowers on long, snaking stalks; *S.* 'Bertram Anderson', with gray-purple foliage; and *S.* 'Nevii', with gray leaves that form pretty clumps similar to hens and chicks (*Sempervivum montanum*). Low-growing varieties of ornamental sedge (*Carex*) are other good options.

—Rob Cardillo



◀ A variety of low-growing plants add color and texture to this shed roof in Laurel, New York.

▶ Grasses cover the roof of a house in northern California, blending it into the landscape.



—Marianne Majerus

◀ Hens and chicks are at home on this beehive roof garden.



—Saxon Hall/Photo Botanic

continued



ON A SHADY ROOF

Landscaper Miskovsky plants in a dense, 4- to 8-inch layer of substrate composed of bits of stone or clay material and soil. This depth holds more moisture and gives gardeners more options. “The trick

to having a successful green roof is to have groups of plants that will work well together with enough diversity,” he says. “So, if one plant’s blooms have finished or a bright leaf color turns pale, another plant will be in flower, making up for it.” He recommends ferns, astilbes, mosses, and

lungworts (*Pulmonaria*), which require minimal care; variegated English ivy, planted to cascade from the roof; *Hydrangea petiolaris*, which will establish roots as it climbs; fameflower (*Tallium calycinum*); chives (*Allium schoenoprasum*); pinks (*Dianthus*); and phlox.

For spot color, he uses annuals such as moss rose (*Portulaca grandiflora*), Califor-

nia bluebell (*Phacelia campanularia*), and geraniums, as well as impatiens. “In shade, impatiens is a good option because the roof soil might be tough and thus limit root growth,” Miskovsky says. “They will likely grow in a more interesting and compact way. . . . The adage ‘a plant for a place and a place for a plant’ really does apply to green roofs.”

A ROLL-AWAY BED

Just as sod can be unfurled on lawns, so too can cultivated surfaces drape over roofs. Xero Flor (www.xeroflora.com) produces pre-planted mats and rolls that contain about a dozen varieties of plants, including sedum, moss, and low-growing evergreens. □□

➤ Garden designer Cleve West created a green roof to cover an arch on his shady garden terrace in Surrey, England.

▼ A green roof provides insulation for this home in Tórshavn, capital of the Faeroe Islands.



Lisa Palmer, who lives and gardens in Rhode Island, wrote about David Austin roses in *The 2008 All-Seasons Garden Guide*.