VOLUME 18, ISSUE 2 MARCH—APRIL 2008



Piedmont Chapter North American Rock Garden Society Chapel Hill, Durham, Raleigh, NC

Rock Gardening in Sand Beds by Peter Korn

I took up gardening twelve years ago, when I basically knew nothing about flowers except for the most common perennials. I bought a house in southern Sweden at Örkelljunga with a plot of land of about 0.7 acre, where I tried out many different soil mixtures and killed thousands of plants in the process. The advantage of not knowing much about gardening is that you have to find your way by trial and error. I have never gone by the book, and I find following the rules very tiresome. So I tend to tear up the rulebook and simply do as I please. I began growing plants in pure sand when I was still living in Örkelljunga. I have since moved to

Eskilsby, about 18 miles east of Göteborg (Gothenburg) in the west of Sweden.

Why Grow in Sand?

The main reason I like sand bed rock gardening is that it is so easy: Just tip a pile of sand onto the lawn; cover it with various kinds of rocks; and you have the perfect rock garden. On the south side of the sand bed you can grow cactus and other warmth-loving plants, while on the north side you can grow plants that prefer to be a little cooler. That is about as difficult as it gets. However, just having numerous piles of sand would be rather boring, so you might like to be a little more creative.



Peter Korn

A comment on Peter Korn's March 22 presentation " Building for Growing"

This is a talk about Peter's garden in Sweden and how he creates different plant beds and environments, thus is able to grow a diversity of plants in cevices, sand beds, peat walls, pits and borders, in full sun and shade, including orchids and cactus. Peter is an extreme gardener.

His talk will complement his article in this issue of *The Trillum*. The siting of the rock garden is the most important consideration, depending on what you wish to grow in it. But you can make a sand bed anywhere. All you have to do is choose plants to suit the location. A rock garden is often sited in a south-facing position, making it suitable for many plants from the sible in this, one of the wettest parts of Sweden. Late summer tends to be so warm and dry that bulbs receive a real roasting and cactus have a chance to mature properly. On the sunny, north-facing slopes I have rock gardens for those plants that like dry, well drained but not too warm conditions. In the woods I have mainly peat beds for forest plants, but here too



South-facing slope after planting and rock placement

Mediterranean, the western United States and Central Asia. However, this would be far too warm for high-alpine plants from places like the Himalayas and New Zealand.

I have a very large garden with a variety of natural features, where I can build numerous rock gardens under all conceivable conditions. Steep south-facing slopes with exposed rock, oak woods, fir woods (only four large firs remain since the recent storms) and a small bog with a cool spring in the middle of the plot.

On the south-facing slopes I have built rock gardens in gneiss and limestone. In this case, I want to create conditions that are as warm and dry as posI intend to build rock gardens for ferns, primroses, and other plants that like shady, well-drained conditions.

Then there are those plants that like dry, well-drained soil but cold and wet conditions. This kind of environment can be hard to create. I have started building rock gardens out in the bog, where the cold springs cool them from below. I try to site these where they will be

shaded by a tree in the middle of the day when it is warmest. I also try to angle the beds so that they receive as much sun as possible without overheating. This combination produces a rock garden that is sunny and dry yet cool and damp. The alternative is to create a wet bed on a north-facing slope (build a pond, fill it with sand, and build a rock garden on top). Here I grow various high-alpine plants, as well as trying out all kinds of things that will not grow anywhere else.

Soils and Mixtures

As mentioned above, I tried out a wide variety of soil mixtures and many worked well. The disadvantage of mixtures containing any kind of compost is that they decompose. After a year or two, all that is left is some rather sticky topsoil, no matter how fluffy it was to begin with. Rock gardens and beds are always best when new. Everything grows easily, and you think you are an excellent gardener. Then, after a few years have elapsed, the soil starts to compact. You can no longer insert your arm up to the and have also switched to pure natural sand for perennials. I still kill thousands of plants but also try to grow anything that has the slightest chance of survival. If a plant can withstand frost, then it might work. I plant several thousand new varieties every year, and it is amazing how many survive. If it works, then I try to plant at least one tray (40 speci-



Dumping a load of sand

elbow in the peat bed, and the rock garden is far too wet, except in summer when it is rock-hard and dry

as dust. What's more, there is tough competition between roots, and nothing grows so easily anymore. You have the same problems even if you plant in sand: after a few years, it doesn't go so well. The difference is that the bed is still well drained and you still have the same sand that you built the bed with.

I have now stopped using any kind of compost in my rock gardens

mens) of each variety. There is always one that is hardier than the rest, and if I can just get one to survive, I can cultivate it further. I have no real inhibitions and really try to grow everything I come across, mostly from seed.

More About the Sand

I don't use the finest grade sand, as it can be too compact. When I moved to Eskilsby, I ordered sand from all the local gravel pits so that I could test which was the

best in which to plant. There were clear differences, but I don't know what they were. I did not send the



Get a big pile of sand

Photo by Peter Korn

(Continued from page 3)

sand for any kind of analysis and was content to conclude that the sand from Landvetter area was the It is easiest to plant the bed before or while you add the covering layer, especially if you are using coarse



Rocks to cover the sand

material. When I plant, I remove any soil the plants may previously have been grown in. Otherwise, they will not take root in the sand but will keep their roots in the clump of soil and wither away when the clump dries out.

Advantages of Sand

The advantages of sand are that it never gets really wet and dries up very fast on the surface. It also retains moisture very well. Look at a

best. It is just a matter of trial and error.

The sand bed should be as large as possible and 8 to 16 inches deep. Nothing must be mixed with the sand! It doesn't really matter what is underneath. I usually build a shell out of the original soil, which is completely useless as anything other than fill (old pinewood). If you are siting the bed on a lawn, it does not need to be excavated first. Most of the grass will die off, and it is easier to remove any that survives than to excavate the lawn beforehand.

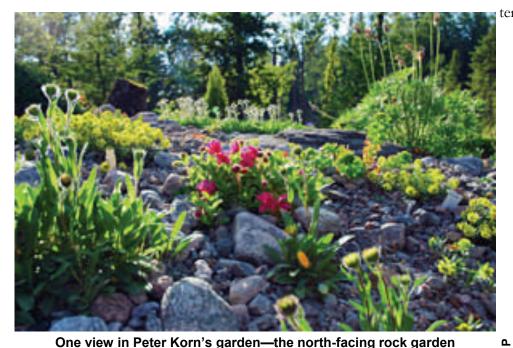
A sand bed should always be raised. If you dig a pit and fill it with sand, it will fill with water during the winter. It is also good if the bed slopes in one direction, to ensure that no water can ever stand. The sand should preferably be covered with something: crushed stone, natural stone, bark or whatever takes your fancy. The main point is that it is coarse, provide drainage and reduce evaporation.



Peter in the muck

beach in the summer: four inches down it is always damp, no matter how warm and dry it is on the surface. I never water anything in my garden except possibly once when I plant it. If it is a dry bed, it should contain plants that prefer to be dry. There are plenty of fun-to-grow desert plants that will never die of thirst. with future dry spells. Roots grow very easily in sand, and often the plants end up with an extensive, deep root system. They probably also compensate for the lack of nutrition with a larger root system. Likewise, they gain in hardiness and maturity.

In the spring, the combination of cold nights with ground frost and strong sun during the day of-



ten causes me problems. The spring sunshine frequently kills more plants than the winter. Sand does not contain so much water, so the ground frost is not so hard and melts very quickly when the sun warms the surface. This gives the plants a source of water so that they do not wither to death. Sensitive evergreens fare much better in sand.

one view in Peter Korn's garden—the north-lacing rock

Since the surface is very dry and barren, weeds will not thrive, and any that take root are easily cleared.

If you live in a very dry area or are one of those people who cannot bear to see their favorite plants lying dry on the ground in summer, then the sand is very easily dampened even when it has become thoroughly dry. However, there are very few plants that die of thirst. Often they simply wither but recover in the autumn. If they fail to do so, then it was obviously the wrong place for that particular plant. If you "torment" plants sufficiently, they will acquire a large root system and cope much better If you grow pot plants in sand beds, you will often find that those that have taken root in the sand grow much better than those in the pots. However, personally I do not think that growing plants in sand-filled pots is effective.

Disadvantages of Sand Beds

The disadvantages of sand are possible leaching and lack of nutrition. My oldest rock gardens are currently five years old and are still growing well. If you wish, you can add a little of your preferred fertilizer. I sometimes use a small amount, but only in those



areas where I have slightly larger plants. I might try some kind of mineral fertilizer with zero nitrogen content, but rainfall still provides enough of that. If I notice a lack of minerals setting in, I will have to look for something suitable.

Annual rainfall where I live averages around 45 inches per year [about the same in the Raleigh-Durham-Chapel Hill area], most of it when it is not wanted. Winter fluctuates between mild and cold, with temperatures above freezing one week but down to -22 F at their coldest, and rarely any certainty of snow cover. Spring is often cold and late. Last year, there was around 12 inches of snow on the rock garden when I opened the garden and nursery to the public on April 1.

There are numerous arguments against growing plants in a sand bed, but usually only from people who have never tried it themselves. People who have tried it are surprised that it can indeed be done. If you don't try, you won't know, and anything that works is right. One tip is to think big! A small pile of sand won't work. Order two truckloads of sand straight away. That still won't be enough. \ll

[This article and accompanying photographs originally appeared in an altered form in <u>The Rock Gar-</u> <u>den</u> 119:106-111 (2007), the journal of the Scottish Rock Garden Club, Anton Edwards, editor. Tom Ellett translated it from Swedish. <u>The Trillium</u> version was adapted by Bobby Ward. Used by permission of Anton Edwards and Peter Korn.

Notice Of Special Event

2nd Spring Open Garden and Art Sale

> Saturday, April 12, 2008 10 am—4 pm

The garden of Amelia Lane at 4904 Hermitage Dr., Raleigh, NC 27612

There will be artists displaying pottery, jewelry, botanical art, metal work, bird-houses, concrete leaf garden sculptures and hypertufa troughs.

The wildflowers should be putting on a good show this weekend. Come and celebrate Spring!

Hosted by Beth Jimenez and Amelia Lane

Elizabeth Lawrence Property Stewardship Fund

The Wing Haven Foundation, Charlotte, NC, has announced that an agreement has been reached to purchase the Elizabeth Lawrence House and Garden. Mary Lindeman "Lindie" Wilson, the owner and steward of this property and a member of the North American Rock Garden Society, has agreed to sell to Wing Haven, giving conservation easements to the Garden Conservancy. Thus the house and garden will be preserved and a program honoring Lawrence's seminal contributions to southern horticulture and garden writing will be developed. Lawrence (1904-1985) is the author of several books, including "A Rock Garden in the South," published posthumously in 1990.

Linking Wing Haven Gardens and Bird Sanctuary and the Lawrence Garden under one mission will mark a new chapter in the life of these two properties, located on the same street in Charlotte, North Carolina. The Belk Foundation and the D. F. Halton Foundation provided funds for this vision.

Information on the Elizabeth Lawrence garden can be found at: <u>http://www.elizabethlawrence.org/friends.html</u>

Information on Wing Haven can be found at: http://www.winghavengardens.com/

Frank Cabot, a long-term member of NARGS, was founder of the Garden Conservancy. Information on the Garden Conservancy can be found at: <u>http://www.gardenconservancy.org/</u>

A \$50,000 Stewardship Fund is being raised to sustain the conservation easement protecting the property. It also honors Lindie Wilson's efforts in maintaining and preserving the property during her ownership. There are many in the North American Rock Garden Society who recognize the importance of preserving this property and honoring the Lawrence legacy. Contributions may be sent to "The Elizabeth Lawrence House and Garden Stewardship Fund," c/o The Garden Conservancy, PO Box 219, Cold Spring, New York, 10516.

Contributions are fully tax deductible to the extent allowed by law.

Last Chance!

Piedmont Chapter Charlotte Area Gardens Tour

Saturday, May 3, 2008 Only 10 spaces left. Sign up quickly.

SCHEDULE

7:30 am. Bus arrives Timberlyn Shopping Center, Chapel Hill
7:45 am. Leave Chapel Hill
10:15am Arrive at Lindie Wilson's garden (Ridgewood Ave.) Then walk to Wing Haven one block away (Ridgewood Ave.) View garden and enjoy box lunch
12:45 pm. Leave Wing Haven
1:00 Arrive Geary Mandrapilias's garden (Markworth Ave.)
2:00 Arrive Bob Rossier's garden (Mammoth Oak Dr.)
3:15 Arrive UNCC Botanical Garden (University Dr.)
4:15 Leave for return to Chapel Hill
6:30 Arrives back in Chapel Hill (Timberlyn)

Cost: \$45. Includes all garden entrances, lunch and bus cost.

Mail payment to Bob Wilder at 2317 Elmsford Way, Raleigh, NC 27608

Note: For those in Virginia and Greensboro surroundings for whom a Chapel Hill pick-up would not be convenient, we are arranging a stop in Greensboro.

Piedmont Chapter Meeting March 22, 2008 10a.m. (Note it is the <u>fourth</u> Saturday) Peter Korn	ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば Your Attention Please! ば We encourage members whose last names begin with ữ and anyone else willing, to bring goodies to the 값 March meeting. ぱ ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば ば	e W
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Totten Center, Chapel Hill, NC		
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336-337-6919 523 S Bunker Hill Rd, Colfax. NC 27235 Marlyn Miller marlynmiller@earthlink.net 919-467-3554 1107 Imperial Rd. Cary, NC 27511 Patricia Scolnik bzhh@aol.com 919-918-7976h 101 Bayview Dr., Chapel Hill 27516 TRILLIUM EDITORS: Dave Duch and Marian Stephenson marian42836@yahoo.com 919-918-3580. 750 Weaver Dairy Rd, #205,CHill 27514	Piedmont Chapter Progra Remaining 'This Seaso April 19, 2008 Tom Stuart, Gardener Croton Falls, NY "Rock Garden Ferns"	on r

Spring Picnic May 3 Bus tour of Charlotte-area Gardens More details—page 7.

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OTHER SIGNIFICANT POSITIONS:

Refreshments: Gwen and Maurice Farrier

Sept. Plant Sale Manager: Kirtley Cox