In early spring, this colourful farm garden in KZN becomes a showcase for the many different clivias the owners are passionate about.

Although this garden in Weenen, KZN, is over 44 years old, the owners Heinrich and Annaleen Heine still regard it as a work in progress. “I’m the third generation to farm here, and when I took over, the garden consisted of two palm trees and a couple of pines,” recalls Heinrich. Since then he and Annaleen have become passionate gardeners and landscapers, which is clearly evident in the magnificent garden they’ve created. “We started off by bringing in 350 trailer loads of good soil from the

WHO LIVES HERE
Farmers Heinrich and Annaleen Heine, their Jack Russell, Rosie, and Jack Russell cross dachshunds Dippie, Ambie and Ash.

THE GARDEN
A farm garden on the Bushman’s River near the small town of Weenen, KZN. Covering about an acre, it features a mix of perennials and annuals with tall trees shading the many different varieties of clivia.
lands to build up the beds. Many of the plants were given to us by friends or grown from slips. I remember when we started planting trees, they cost less than R2,50 each,” laughs Heinrich. Varieties he’s planted include camphors, Celtis africana, kapoks and Natal bottlebrushes. “I always plant trees in groups of three, as I like the balance,” he says. Together with the tree ferns, these trees help to moderate the extreme conditions in the area. In winter, the temperature often drops to freezing point and below, while in summer, 40°C and over isn’t uncommon. “We’ve had to plant a screen of trees and shrubs down the south side to shelter us from the icy winter winds.”

The trees also provide shade for their huge collection of clivias, which put on a spectacular show in early spring. “We started the clivia garden with 20 seeds given to us by friends. We supplemented them with unusual varieties which we bought at the garden show in Pietermaritzburg.” Every year they save the seed and propagate their own plants (see box overleaf). When asked how many they’ve planted over the years, Heinrich answers “Thousands!” Paths made from stones and pebbles from the property to more suitable areas where they now add vertical accents. They’ve also used the more than 30 grindstones, discovered over the years, to make attractive features.

As this valley is extremely fertile, they’ve been able to grow a wide variety of colourful plants including alstroemerias in 16 different shades, hibiscus, dahlias, bougainvilleas, strelitzias, buddlejas, fuchsias, daylilies and geraniums. They’ve also had success with roses. “My favourites are ‘Garden Queen’, ‘Forever Friends’ and ‘Knock Out’. We also love ‘Deloitte & Touche’ and have planted it in pots,” says Annaleen. For added colour in summer, the Heines rely on marigolds, begonias and petunias.

Unfortunately, a nutrient deficiency in the borehole water turned the leaves of many plants yellow, so they are now irrigated with river water. Beds are mulched with home-made compost (see box overleaf).
PROPAGATING CLIVIAS

“We like to think we’ve perfected propagation by seed,” say Heinrich and Annaleen. “We keep our seeds in a small hot house until they are ready to plant out and our prize clivias in big pots under the camphor tree.”

1 Place a sheet of kitchen roller towel in the base of an empty ice cream tub and dampen it with water.

2 Place the peeled and soap-washed seeds on top, about 2cm apart, and close the tub.

3 Wait for two weeks before opening it. There should be a root and cotyledon sprouting from each seed.

4 Take the sprouts and plant them in a tray of river sand and compost and in a few weeks, you should have new clivia plants.

5 But be aware that these will only flower in about 3–5 years’ time.

and fertilised with 8:1:5 twice a year. As clivias have different requirements, they are fed with 3:1:5 in summer and again in June. Offsetting the beds are lush green swathes of Berea (LM) lawn, which grows in both sun and shade. “We mow every week in summer and fertilise with Greensulf and LAN every eight weeks,” says Annaleen.

With such a plethora of plants, the garden has attracted a variety of birds. Ground and trumpeter hornbills are regular visitors as are spotted eagle owls and Burchell’s coucals.

The garden is still expanding and developing as Heinrich and Annaleen can’t resist changing and adding to the magical landscape they’ve put their hearts and souls into.

THIS PAGE, CLOCKWISE FROM TOP LEFT:
● A trellis was placed behind the bench for detail. ● ‘Cameron Peach’. ● This light yellow clivia was a gift from Heinrich’s mother many years ago. ● A Chinese lantern in the foreground is one of many shrubs. An owl box is home to two spotted eagle owls.
The world of clivia breeding is one of dedication and ardent competition. Although clivias were discovered in KwaZulu-Natal in the 1800s, it was the advent of the yellow-flowered Clivia miniata that inspired horticulturists in the early 1900s to begin their selective breeding of the plant. “Due to the tireless work of breeders over the years, clivias now come in a multitude of colours, including brown, brick, bronze, gold, green, orange, peach, salmon pink, red, white and yellow, as well as colour patterns such as bicolour, versicolour and ghost,” explains Sakkie Nel of the Clivia Society of South Africa. They’re also bred to flower more often, grow more vigorously, bear more blooms and have a higher resistance to pests and disease. Thanks to passionate local and international breeders, there are now even more beautiful and interesting colours and patterns available. Exciting Colours

Breeding a clivia with a new colour or pattern takes years of work. “Growers dreams of being able to determine the colour of a new flower at seedling stage without having to wait four years or more to see its first flower,” says Sakkie. Although not as readily available as the orange and yellow varieties, there are many clivias with extraordinary colours to choose from today including ‘Red Planet’ from Clivia Couture, green ‘Winter Mint’ from the Clivia Guy and multicoloured ‘Spirit’ and ‘Dreaming’ from Utopia Clivias.

Unusual Bloom Patterns

Versicolour: The outer surface of the tepal (a flower’s outer whorl) is a different colour to that of the inner surface. For example, green, white and orange ‘Star Green Destiny’ and ‘Over the Moon’ from Utopia Clivias.

Picotee: More than 90% of the tepal length is the throat colour, with enough colouration across the tips to create a ring around the edge of the flower. ‘Picotee Lace’ from Utopia Clivias has creamy yellow and orange blooms.

Reverse Picotee: Ten percent or less of the outer edge of the flower is white. ‘Dreaming’ from Utopia Clivias is an eye-catching orange with a distinctive white outline.

Multicolour: These have flowers consisting of three or more colours. ‘Planet Earth’ from Utopia Clivias has cream and yellow on the inside, and a pink blush on the outer tepals.

Bicolour: The tepal has two colours, with the throat colour reaching from 50% up until just under 90% of the tepal length. For example, yellow and orange ‘Mississippi’ from the Clivia Guy.

Ghost: Patches of missing colour pigments on the petals define this phenomenon called ghosting. This includes flowers with distinct differences in the tepal colouring such as the beautiful orange and white ‘Spirit’ and cream and orange ‘Spectre’ from Utopia Clivias.
PLENTIFUL PETALS

Multi-tepal flowers are less common and much sought after. The perianth (outer part of the flower) of a normal clivia consists of three outer and three inner perianth parts, called tepals. Multi-tepal clivias have four outer and four inner perianth members. An example is 'Bronze Velvet' from Utopia Clivias, which resembles a chrysanthemum.

BRED TO LAST

“A breeder’s aim is always to improve a plant, whether it’s the vigour, flower count, colour or pest and disease resistance,” explains Carrie Kruger of Utopia Clivias.

According to Gerhard Faber of Clivia Couture, introducing Clivia mirabilis genes to a breeding programme results in increased disease resistance and hardiness. This is because the high amount of anthocyanin it contains protects the plant from harsh climatic conditions, and the toxic alkaloid, lycocrene, makes it more disease resistant.

Further breeding potentially produces stronger plants in the next generation. ‘Star Green Destiny’ from Utopia Clivias is an example of this. It also flowers twice per year and has a flower count of 30 blooms per umbel.

INTERNATIONAL DEVELOPMENTS

Polyploidisation ensures that all the genetic characteristics in a plant are present in a higher frequency than normal, and this is likely to be the future of clivia breeding. Aart van Voorst of TetrA art Breeding in The Netherlands creates polyploidy clivias artificially. “With the use of a chemical, colchicine, from the bulbs of Colchicum autumnale, the chromosomes of plants can be doubled, resulting in superior specimens. Polyploid or tetraploid plants can have bigger flowers, thicker leaves and other new characteristics,” says Aart. They’ll become more available in the coming years. Examples bred by Aart include ‘Tetra7’, a compact plant with huge flowers, ‘4Security’, a giant tetraploid Clivia robusta, and ‘4Yellow2’, a compact yellow tetraploid with large yellow flowers and dark yellow centres.

“For many years, the clivia has enjoyed a large following in China,” says Hein Grebe of Plant Hunters. Chinese hybrids tend to have short, showy leaves, and are mostly variegated, or feature patterning and bred to be kept indoors on a windowsill. The most expensive and sought-after clivia in China is the raised vein clivia, whose leaves are thick, hard and structured.”

SOURCES: Clivia Couture gfaber@mweb.co.za, Clivia Guy rouzell@mweb.co.za, Clivia Society of South Africa cliviasociety.org, Plant Hunters hongrebe@gmail.com, Sakkie Nel corgas@vodamail.co.za, TetrA art Breeding a.vanvoorst@rixnet.net, Utopia Clivias utopiaclivias.co.za