Surviving Zone Denial:
Establishing Exotics in Your Backyard

By James Powell

The plant world is filled with anachronisms – plants that cling to forms better suited to another time: fruits meant for seed dispersers long extinct, flowers that pine for pollinators once plentiful. Connie Barlow popularized the idea of anachronistic plant fruits in her book, *The Ghosts of Evolution*. Its pages are haunted by stories of lost companions – the possibility that pawpaws were meant for mammoths, avocadoes were intended for extinct giant sloths, and ginkgo fruits for dinosaur scavengers. But if a fruit can persist in form and structure for hundreds or even thousands of years or longer, can cold hardiness also lay dormant in bananas, palms, and other tropical herbaceous plants, a memory of colder climes?

Many gardeners secretly delight at their first glimpse of spiky palm fronds on a Florida road trip. They turn green with envy at the sight of camellia blossoms at Christmas, or swaying banana leaves green and vibrant in February in some coastal front lawn. But many of us do not live in tropical or subtropical regions, and instead must cope with the stern, graying effects of long chilly winters. We and our tropical plants experience an all-too-brief warm summer on the patio, followed by a long spell trapped in an interior desert where the humidity is low enough to wreak havoc on sinuses and stomata alike.

As luck would have it, there are some plants we would all think of as tropical that have developed or retain a surprising ability to endure cold, harsh weather. The explanations for this ability are likely as varied as the plants that exhibit it. Some live in environments where the climate can go from one extreme to another in a very short period of time, in any season of the year. There are numerous trees and shrubs from New Zealand and South Africa that have adapted to sudden weather changes or prolonged seasonal variations, including callas, cycads, flax, and Eucalyptus. Others may retain a latent ability to endure severe cold as a result of past climates – an anachronistic legacy hardiness serving no purpose in the environment in which the plant currently grows, but reflecting weather conditions it experienced in the distant past.

A few years ago, when I bought my first house, I began experimenting with plants that were hardy in the next zone over (I live in USDA Zone 6b). I began by laying to rest a pair of fading dogwoods and two sickly lopsided contractor-grade maples. They made better mulch than shade. I replaced the maples with Blue Atlas cedars (*Cedrus atlantica*), an evergreen true cedar with blue-gray foliage from northern Africa. Advertised as hardy to Zone 7, it had no problems surviving cold and windy Zone 6 winters. While I attempted some semblance of design in the front yard, the backyard was strictly botanical garden style; since I like variety, I promptly decided I would grow one of everything. That's the advantage of loving plants and eschewing design: unlike Noah, you don't have to find a mate for each new acquisition

Soon I started eyeing plants that normally grew farther south. This wasn't the first time I'd drifted into what some call "zone denial." Years ago, I lived in a first floor apartment with a front garden. There, I discovered that callas come back every year with just a modest covering of mulch. I also found that the blue passionflower (*Passiflora caerulea*) is root hardy here, and

that sago palms are not. Much to the dismay of the rental office, I also discovered that wisteria roots have a fondness for cracked sewage lines.

Another evergreen that I had a surprising amount of success with was the monkey-puzzle tree (*Araucaria araucana)*, which is found in mountainous regions of Chile and Argentina. I bought the largest specimen I could find, a potted plant that stood about eight inches tall. Monkey-puzzle trees in profile are as alien and exotic looking as flattened, wind-swept acacia trees on the plains of Africa. Adult trees have a pale trunk topped with an umbrella-like crown of dark branches. The short, broad, triangular leaflets cover nearly every inch of juvenile plants. Hollywood has a fondness for portraying dinosaurs wandering along the edge of monkey-puzzle forests, no doubt looking for something more suitable to eat. Each leaflet bears an extremely sharp pointed tip, so planting, pruning, or even walking near one can be a painful experience. I found that their dark spiny whorls are completely impervious to the cold.

That same year, I planted a pair of Omeo gums which is a eucalyptus with vivid blue leaves from New Zealand (*Eucalyptus neglecta*), a hardy banana from Japan (*Musa basjoo*), and a hardy palm (*Rhaphidophyllum hystrix*) native to North Carolina. The palm turned out to be a sturdy, slow-growing evergreen. Numerous snows blanketed all but the tips of the fronds, yet when I bothered to brush the snow back once or twice out of concern, I found the palm unharmed. The eucalyptus grew rapidly the first year. I did it more harm than good when I covered them with cardboard boxes during a bitterly cold week, because I left them covered too long and heat built up causing them to dry out and die back. Yet the roots managed to survive, and the shrubs survived a second winter, even managing to grow in chilly February, during a warm spell. The banana was a gamble. I read it was hardy to Zone 7 (like the Blue Atlas cedar). It grew into a five foot shrub its first summer, then turned to a gelatinous pile of mush after a few frosts. I made a mound of the remains over where I thought the roots might be, and come May, it was putting up its first leaves.

Before I moved out of my first house, I had a well-established menagerie of exotics. Over the gate to my backyard grew a vigorous maypop vine (*Passiflora incarnata)* that faithfully returned from its roots every year, and had begun to sucker in other parts of the yard. A large bed of callas of every available form and color grew in a large bed next to the house, partly shaded by a large stand of bamboo. The banana had returned after two winters, larger each year. The eucalyptus survived subsequent winters with only tip burn, which I sometimes find even in hardier over-eager late growers. The monkey puzzle nonchalantly endured wind, sleet, and snow, seemingly impervious to harsh weather, but in no rush to grow larger. Likewise the needle palm was completely oblivious to the harshest weather, producing two or three new fronds each summer, and even seeming to grow a bit during unseasonably warm weeks in November and March. Other performers were false dracaena (*Cordyline australis*), which held its own until January when the cold would finally knock it down to its roots, and the elegant broad-leafed China fir (*Cunninghamia lanceolata)*, which turned a beautiful bronze in late fall.

Final Thoughts…

Extending your zone requires many of the same tools as regular gardening. You need good soil, mulch, a sheltering wall or fence, burlap, a good general-purpose water-soluble fertilizer with a 15-30-15 ratio of nutrients, and a plant vitamin and hormone formula to encourage rapid root

growth, such as "Superthrive". Good soil, regular applications of fertilizer during optimal growing conditions and growth stimulants help a plant establish a strong root system. Give your new plant every opportunity to become well established by planting in early spring if possible. Mulch can protect the roots both from summer heat and winter cold. A protected area such as a fence or wall provides a microclimate that can prevent temperatures from reaching the extremes experienced elsewhere in a garden, and can extend growing time. Burlap is essential both to protect from the winter cold and the drying winds which can be especially damaging to a fragile plant stressed by other environmental factors. And most of all, be patient and persistent. Not all failures are due to temperature extremes. Plants that normally grow in warmer climates often take advantage of warm spells while the plants we are more familiar with remain dormant. Maybe you'll be the first to discover a secretly hardy tropical at your local nursery.

Looking for a place to start? The palm-like cycads have been around for 100 million years, and some species, including *Dioon edule, Cycas panzhihuaensis,* and *Ceratozamia hildae* have been reported to demonstrate considerable tolerance for cold weather. I have also recently begun experimenting with *Agave* species, including *A. parryi*, *A. bracteosa*, and the massive *A. americana,* and all seem to be holding up well.

A selection of hardy exotics:

Needle Palm *(Rhaphidophyllum hystrix* – native of North Carolina)
What northern gardener wouldn't get excited at the prospect of growing a palm in their yard? Well, the needle palm is perhaps the world's hardiest palm. This trunkless fan palm is reported to survive temperatures well below zero degrees Fahrenheit with no damage, which I can attest to myself.

Hardiness: 6b with no protection, probably much colder

Culture details:
The needle palm is extremely hardy, but slow growing. Mulch around the base helps preserve moisture, which speeds the plants' growth. An established plant can survive bitterly cold winters where night temperatures occasionally drop into the single digits, with no frond damage. Plant it near a wall or fence to encourage early spring growth, and to provide it with the partial shade that it prefers.

Saw Palmetto *(Sabal minor* – native of South Carolina)
Somewhat less hardy than the needle palm, saw palmetto's large deep green fan-shaped fronds emerge from the ground in late spring and well into fall. But unless the plant is wrapped and protected, these leaves will turn to straw-colored ghosts by January; new leaves will return in the spring. Other fan palms worth trying are the tall growing *Trachycarpus* species (*T. fortunei* – China, *T. takil* – north central India), which are also reported to survive under the same conditions once established.

Hardiness: 7, 6b with protection

Culture details:

If wrapped in burlap and planted near a building, this plant can maintain its leaves year round. Otherwise, all exposed fronds die back to the ground. It benefits from heavy mulch and lots of water. It is a slow grower and will tend to fade away after a few years of heavy winters without protection.

Omeo Gum *(Eucalyptus neglecta* – native of New Zealand)
Even if you don't have a pet koala, you will want to give this fragrant beauty a try in your temperate garden. This eucalyptus can grow into a large evergreen shrub if the winters aren't too severe. It maintains its round bluish-silver leaves as an adult, unlike some other eucalyptus varieties. It is fast growing and continues to grow well into December unless there's an early hard freeze.

Hardiness: 7, 6b with protection

Culture details:
In warm climates, this eucalyptus can quickly become a medium sized tree. It usually manages to stay evergreen in Zone 6, with the leaves and stems turning a deep purple. Heavy mulch can protect the lower stem and provide studier and faster growth in the spring. Late season growth often gets burned if it hasn't hardened before the first frost. It is very vulnerable to the drying effects of winter wind, so it is happiest as a foundation planting out of the path of prevailing winter winds.

Monkey-Puzzle Tree *(Araucaria araucana* – native of South America)
Monkey-puzzle is a name used to refer to several species of *Araucaria*, a tropical conifer family that includes the Norfolk Island pine. This native of the mountains of Chile has reportedly been grown as far north as British Columbia. It endures snowfalls in its native habitat, and seems to do quite well during cold Zone 6 winters. This tree resembles nothing you've ever seen growing in Zone 6 before, but is no more cuddly than a cactus or a porcupine, so it pays to plant it in an out of the way section of your garden where it can be enjoyed…from a distance.

Hardiness: at least 6b, possibly colder

Culture details:
This plant likes to stay on the moist side when young, and likes its roots to stay cool. It can tolerate cold wet winters and snow with no visible damage. It benefits from being placed near a wall or fence, and from mulch around the base, mainly to avoid drying out. Another somewhat less hardy species in this genus (*Araucaria bidwillii* – northern Australia) has more of a Norfolk Island pine look with long narrow leaves covering the branches. But this plant needs a good deal of protection or it will die back to its roots in Zone 6, weakening and eventually perishing after a couple of winters.

China Fir *(Cunninghamia lanceolata* – native of South China*)*
The china fir is remarkably similar in appearance to *A. bidwillii*, but is much hardier. It has slightly longer leaflets that curl down a bit at the tips. It is also less prickly than the *Auracaria*. The leaves turn an attractive bronze in winter, then revert to a vivid green in the spring. The

underside of the leaves is almost white. It is a moderately fast growing tree that branches often. It can ultimately reach 30 feet.

Hardiness: 7, 6b with protection

Culture details:
It doesn't appear to require any special protection from the elements in Zone 6. Mulching helps to keep the plant from drying out during long, cold, dry winters and rich, well-drained soil ensures rapid growth from spring through mid-summer. The occasional dead branch is an unfortunately common characteristic of this tree as it gets larger, but they can be removed without harming the tree, and this tends to give the tree a rugged picturesque appearance.

Calla *(Zantedeschia sp.* – native of South Africa)
Callas have been getting more interesting in the last 20 years. Once upon a time, there were three basic colors: pink, white and yellow. Today there are variants ranging from green to almost black. After the plants bloom, they continue to put on a show with their compact, upright, sometimes variegated foliage. In Zone 6, callas return year after year with almost as much reliability as hostas and other more traditional fare. Like many aroids, they experience a dormancy period in their native South Africa, so a Zone 6 winter is simply a variation on a theme for them. As long as the bulbs don't freeze in the ground, they will return and gradually spread to form large masses of tropical leaves and exotic blossoms year after year.

Hardiness: 7, 6b with protection

Culture details:
Mulch is essential, and a location close to a sidewalk, wall or fence will help avoid damage during exceptionally cold winters where the first inch or so of the ground freezes briefly. Since they experience a dry cool period in nature where they die back to the roots, Zone 6 winters are compatible, if more severe with their natural cycles. Pile 4-6" of additional mulch over the bulbs in late fall for added protection and larger plants the next spring.

Black bamboo *(Phyllostachys nigra* – native of Japan)
Tropical and temperate regions throughout Asia are filled with great many varieties of bamboos of varying shapes, sizes and colors. Until recently, I was sure that I could grow any bamboo as long as it was green and dull. But the black bamboo has proven to survive Zone 6 winters. It grows more slowly than its hardier cousins, and tends to dislike cold drying winds, but with just a little protection and a little extra water in the winter, it can form dense stands filled with beautiful purplish-black canes and deep green leaves that can add a tropical air to a dull, unattractive garden corner. Some varieties are actually grown for timber in Japan.

Hardiness: 7, 6b with protection

Culture details:
Black bamboo is less hardy than some of its cousins but the deep purple canes are well worth the effort. Good mulch and constant moisture is essential and this plant suffers in an exposed windy location. For good results, it must be planted against a wall or fence, which provides protection

from the prevailing winter winds. If you must try it in a windy location, wrap the canes with burlap in late November and leave them wrapped until early March. It may take a couple of years to become fully established.

False Dracaena *(Cordyline australis* – native of New Zealand)
A houseplant has escaped into the temperate garden! When I first heard that this dracaena-like plant would return from its roots in the spring, I was highly suspicious. When I planted mine in an out of the way but not at all protected spot in my garden, I wrote it off in the fall. But late in December it was still growing and green, despite numerous frosts and cold nights. Finally, a hard freeze in January caused the plant to topple over and die. I was sure it was gone then. But in May, not one, not two, but three new growth tips appeared around the fibrous stump of the previous year.

Hardiness: 7, 6b with protection

Culture details:
This plant is increasingly common at garden centers of home improvement shops because of its exotic growth habit and appeal as both a houseplant and as a point of interest in a bed of annuals. It turns out that it is also modestly hardy and will return from the roots in late May, if mulched sufficiently. Oddly enough, it tends to stay green and even continues to grow until the coldest days in January, when it abruptly gives up and dies back to the ground. One plant often produces multiple growth points in subsequent years.

Beaked Blue Yucca *(Yucca rostrata* – native of Mexico*)*
Few if any yuccas save the ground hugging thorn-tipped varieties seem to grow in cool Zone 6 climes. But this silvery blue upright variety can withstand the harsh winters of colder areas, and will eventually grow into a small trunked shrub 6-8 feet tall. Its ability to survive colder weather is due in part to its thick generous root structure, and to its narrow thin leaves. It is a strikingly beautiful plant that happily endures hot dry summers as well. Plus it is more approachable than its hardier though duller cousins.

Hardiness: at least 6b, possibly colder

Culture details:
Blue yucca will grow in any sunny location, once established. It requires no special protection in Zone 6. Its thick roots penetrate deep into the soil so there's little chance an especially cold winter would kill off this desert beauty.

Tree cholla *(Opuntia imbricate* – native of the southwestern United States)
Many species of *Opuntia* will grow in colder climates, but only a couple of varieties of prickly pear cactus are commonly cultivated. However, some chollas will also survive Zone 6 (and even Zone 5) winters. The tree cholla is a many-branched upright grower that bears little resemblance to its cousins. The glossy green cylindrical stems are covered in spines, and turn purplish in winter.

Hardiness: at least 6b, probably colder

Culture details:
Like all cacti, it prefers sandy, well-drained soil, especially if you experience wet winters. It makes a good companion to the variety of hardy prickly pear or rabbit ear cactus to which it is related.

Maypop Passionflower *(Passiflora incarnata* – native of the southeastern United States)
What plant is as tenacious as poison ivy, as vigorous as crab grass, as fragrant as honeysuckle, and as blue as the sky on a fall day? Well, a maypop, what else? This plant can climb 20 feet or more, bear dozens of exotic blue flowers, and form numerous pithy but sweet lime sized fruits all in a single summer. Its only flaw is that it spreads rapidly underground, so the following year you might find it tumbling over your other perennials and winding its way up nearby trees. Still, it is easy to control since the stems remain narrow and pliant, and if all else fails, you can let the first few frosts take care of the problem for you.

Hardiness: 7, 6b with protection

Culture details:
One of the hardiest members of the passionflower family, this vigorous vine dies back to the ground in late fall, but returns with multiple shoots from its spreading underground roots in late spring. The beautiful fragrant blue flowers appear from July until frost, and it will occasionally produce an edible tasty, if pithy greenish fruit the size and shape of a small lime.

Japanese or Hardy Banana *(Musa basjoo* – native of Japan)
Okay, so you've made it this far and said, yes I can see this or that plant might survive one of my long cold winters, but a banana? No way! Well, think again. This banana has all the classic features of its cousins, which fill the produce shelves with over (or under) ripe fruit throughout the year. But it doesn't provide edible fruits, just tropical comfort. While it does promptly turn to mush after the first hard frost, the roots happily bide their time underground until the ground warms sufficiently in the spring. Then, multiple trunks emerge rapidly forming a small tree 4-8 feet tall in a single summer. In a sunnier location, the midrib of the leaves will turn red.

Hardiness: 7, 6b with protection

Culture details:
It should be planted near a wall and in a less windy location to avoid tattered leaves and additional stress. A thick layer of mulch is a requirement. It also likes plenty of water. Regular watering will provide more vigorous growth in the summer, and ensure a greater likelihood of survival in a severe winter. The plant is sort of self-mulching, as it dies back to the ground each winter. You can leave the dead trunk and leaves where they fall as extra protection during the winter.