



Bermuda Botanical Society



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FEBRUARY 2018 NEWSLETTER

FROM THE EDITOR

Dear Members,

The 2017 AGM, on October 29th, saw Nigel Turini step up to assume the presidency of the BBS, with Peter Lee remaining as the vice-president. Two new members were elected to the Board, Pamela Pitt and Jennifer Flood. Alison Copeland and Lisa Greene volunteered to lead guided nature tours.

The annual Christmas Party was held at Marijke Peterich's house, and was very much enjoyed by all who attended.



In January Jennifer Flood organised a tour of Cooper’s Island, led by Alison Copeland. It was a truly beautiful day, and Alison provided us with a lot of fascinating information about the area which used to belong to NASA, but which has now been turned into a spectacular wildlife reserve. Although Alison had set the limit at 18 participants, we ended up with 26 – and a waiting list. A very successful afternoon. Many thanks to both Alison and Jennifer.



OLIVE, OLEA EUROPAEA

BY JENNIFER FLOOD

“Long lived evergreen tree with narrow leaves in opposite pairs “

So begins the text book description of an olive tree, but it barely does justice to this remarkable plant.

Olives were an important part of Corfu since the time of Homer, “On them (olive) fruit never fails” but it was the Venetians in the 14th Century who implemented large scale planting of olive trees, specifically the Lianola variety. By 1766 nearly 2 million had been planted and today it is estimated that there are 3 to 4 million trees across the Island! Products include olive oil, olives, tapenades, soaps, lotions, along with practical and artistic wood workings.

I fell in love with the olive trees of Corfu this year. There is something in the twisted, rugged trunks, the two-toned silver green leaves that change colour in the slightest breeze; the silhouettes against a clear blue sky, or an orange tinged sunrise, or velvety purple twilight, that just grabs and holds your attention. They exude character, durability, resilience.

Visiting a local craftsman, the workshop in the middle of his olive grove, who had brought out the beauty of the wood in a finely turned bowl, just asking to be held; or the wonderful grainy patterns in a cutting board made from the olive tree root, inviting a touch. Perhaps I am holding something that saw Barbarossa lay siege to Corfu Town?

Walking through deeply shaded, silent, Tolkienesque woods, half expecting to see hobbits, ents, elves or other magical beings.

Late evening, sitting in an olive grove listening to local musicians during the village wine festival, or another night, alone among the olives but for the cacophonous chorus of cicadas, and silently flitting bats, evoking times past.

Gnarled survivors, witnesses to successive waves of human invaders, be it Venetians, Moors, Italians, Germans, pirates or tourists - the olives watch, provide all with their bounty, and outlive them.

“... The small white flowers have only two stamens and the oval, one-seed fruits”





THE YEAR OF THE BIRD BY LISA GREENE

The American Audubon Society, National Geographic, BirdLife International, and the Cornell Lab of Ornithology have joined in a yearlong celebration of *birds*. Not only is it the 100th anniversary of the signing of the Migratory Bird Treaty Act—a pivotal piece of legislation that continues to save countless birds’ lives—but birds are facing many new and serious threats.

In support of these organizations’ Year of the Bird, the Botanical Society will feature at least one article in each newsletter, and regular FaceBook posts, related to birds in Bermuda and their connections to the island’s plants and habitats.

A big part of these organizations’ goal for this year is to encourage people to take action. With that in mind Here is an article from 2009:

For many, I think, the pleasure of plants or gardening stops with the plants. But without a great deal of effort, you can add another dimension to your garden – wildlife! Wildlife in Bermuda means mostly birds, but also butterflies, toads, whistling frogs, dragonflies, lizards and spiders. More wildlife in your garden will lead to a more balanced garden and will probably mean that you can spend less time applying pesticides as long as you’re willing to put up with some imperfections such as some insects and a few chewed leaves. You’ll benefit by having a healthier garden for you and the environment, and hours of pleasure watching and learning about your visitors.

There are plants that are attractive to birds and others to butterflies – some of these are specific but quite a few plants overlap. You could start by setting out to specifically attract either birds or butterflies, but what you’ll probably find is that you’ll get both in due course.

There are only 23 types of birds that breed in Bermuda (excluding feral and domestic birds) but there are over two hundred different types of migrant birds that visit Bermuda every year and many of these would be delighted to spend some time in your garden if you supply a few of their basic needs. Ultimately, what you want to provide is food, water, cover, nest sites and perches. This means doing more than putting up a feeder and a birdbath, but it doesn’t all have to happen at once and can be done in steps.

There are several things you can do, with only a little effort, to encourage more of our local wild birds and some of the visiting birds to your garden. Outlined in this and next week’s articles are some steps you can take toward a more bird-friendly garden. (Excerpted and abbreviated from the Brooklyn Botanic Garden publication: Bird Gardens, Welcoming Birds to Your Garden.) As expressed in the movie /Field of Dreams/, build it and they will come.

- 1- Perhaps one of the most important things you can do immediately, in the dry weather of our summers, is to supply a source of water.** Birds will get much of their water from the food they eat but they will also use open water for drinking and bathing. And in our hot summers birds need water to cool themselves off. Water is also important in the spring and fall, during migrations, for visiting birds to rehydrate. Shallow puddles, pools and birdbaths will all do. Birdbaths on pedestals, out of reach of predators such as cats and easier to clean than ground-level baths, are a good choice. They should have a shallow slope because birds with short legs avoid deep water. Clean the bath every few days in summer and top it up frequently. Make sure it is deeper than 3” at the deepest spot. If you really want to please the birds, provide a pool or bath that has dripping action. Larger garden pools are good too.
- 2-Re-create the layers of plant growth found in local natural areas such as nature reserves.** (The wooded hillsides of the Spittal Pond nature reserve are a good example.) Look at other bird-friendly gardens to get a sense of the structure needed. Then sketch a map of your property and buildings to identify the features needed to attract, protect and nurture birds. Plant tall trees for a canopy above, with intermediate sized trees for an understory. Below this plant a layer of tall shrubs and then smaller shrubs and finally groundcovers. Make sure to plant vines so that the layers are intertwined/connected. The layers are important because the birds use them for different purposes. For example, they sing from the highest tree, build nests in layers of tall shrubs, and find food by scratching through leaf litter. They gather nest material from all the layers, including leaves and bark.
- 3-Select plants with an eye to providing nutritional food during different seasons.** Try to include variety to help sustain birds that visit your garden throughout the year. In the spring and early summer, birds are raising their young and some migrants are stopping on their way north. In the fall, many migrants are stopping to refuel with food and water, particularly if there is stormy weather. They’ll be looking for fruit, insects, pollen, buds, flowers and nectar – as well as a safe haven.
- 4-Plant several of the same type of trees and shrubs in clumps.** This will improve pollination and therefore fruit yields. Clumps of plants are also more visible to birds. Create a natural look by not planting in rows. Plant in odd numbers.
- 5-Provide at least one clump of conifers.** They’re good for shelter during storms and winter weather. They’re also preferred roosting and nesting sites. Casuarina and cedars are good options, but other conifers, such as the aleppo pine, are available as well,
- 6-Spare a dead tree.** A dead tree or branch is good for perches which are used as singing posts to defend territories. Also leave dead branches on live trees for perches. Dead trees can also be a great place for a nestbox, if you can protect the box from predators!
- 7-Leave vines or plant them.** Vines provide birds with perches, nesting places and leaf surfaces that insect-eaters can scour. Fruit-producing vines are best.
- 8-Limit the size of your lawn.** A manicured lawn doesn’t supply much food or habitat and often contributes to environmental problems from fertilizing, mowing, and applying pesticides for insects, diseases and weeds. Instead, replace high maintenance grass with low maintenance alternatives such as natives, wildflowers, shrubs, and groundcovers.
- 9-Avoid invasive non-natives.** Invasive plants such as Mexican pepper, Chinese fan palm and Surinam cherry are threats to native vegetation and wildlife because they out-compete them and form a monoculture which doesn’t provide the variety that is necessary for a diversity of wildlife and is then very susceptible to being wiped out (as our Bermuda cedar was). The problems caused by invasive plants outweigh any short-term benefits, especially when there are attractive alternatives.
- 10-Provide nest boxes to encourage bluebirds.** Boxes are available from the National Trust and the gift shop at the Aquarium.

11-Leave some leaf litter. Pile leaves under hedges or trees that produce dense shade to create feeding places for ground-feeding birds. Decaying leaves attract earthworms and insects and other animals for birds to feed on.

12-Use pesticides sparingly, if at all. Some harm birds directly. Others contaminate insects and other creatures that birds feed on.

Here are just a few plants to that will attract birds.

Tall plants:

Casuarina and conifers; Cedar and other junipers; Allspice; Black Ebony; Southern Hackberry; Fiddlewood; Magnolia; Bermuda Palmetto; Mulberry; Olive

Medium sized plants:

Buttonwood; White stopper; Elderberry; Viburnum; Junipers

Shrubs:

Bermuda snowberry; Sea ox-eye; Pigeon berry; Bermuda holly; Junipers; Wax myrtle; Hibiscus; Natal plum; Blackberry; Turkey berry; Forestiera; Odontonema

Vines:

Honeysuckles ; Virginia creeper; Grape

Annuals:

Coreopsis; Sunflowers; Indian blanketflower; Marigolds

If you plant the right plants and you're really lucky, you might even attract hummingbirds to your garden. Hummingbirds are being seen in Bermuda more often every year. They are primarily nectar-eaters and obtain their liquid meals deep within flowers, particularly red tubular flowers. They also eat large quantities of insects and spiders which they snatch from flowers.

If you're thinking that developing a bird-friendly garden is a bit daunting, don't despair. Like any garden, it's one that is created over time. Start with a plan and tackle it step by step. If you're discouraged by the small size of your garden, get your neighbours involved (involve them anyway) and encourage them to create bird-friendly gardens as well. This is a project that'll be good for the birds, you and Bermuda.

If you'd like a list of plants that support birds, please call the author at 299 2329 x 2123.

Please visit the web pages for the organizations for articles and inspiration:

<http://www.audubon.org/news/how-birds-bind-us>

<http://www.birdlife.org/worldwide/news/flyway>

<https://www.allaboutbirds.org/6-resolutions-to-help-you-birdyourworld-in-2018/>

<https://www.nationalgeographic.org/projects/year-of-the-bird/>

MUSHROOMS AGAIN!

BY GEORGE PETERICH

This is a sequel to the story about edible mushrooms that I found in Bermuda. I remember that meal of oyster mushrooms very well. I found them in the Park and the readers may remember the photo of them in the frying pan (plus the warning words of the editor).

Recently while I was away my wife, Marijke, found a few mushrooms that looked like known edible ones to her. She looked them up in our mushroom books and on the Internet and found they were edible indeed, so she fried them. She told me it was a nice treat. They were *Boletus pinophilus* – pine loving boletes – and she found them of course under a pine tree, the Aleppo Pine (*Pinus halepensis*) that grows in our garden. I remembered having seen a circle of them on that same spot years ago, but I did not think of harvesting them then.



If you look closely, you can see a few pine needles in the grass. *Boletus edulis*, Or rather boliti edules, painted by Lucas Peterich in 1945

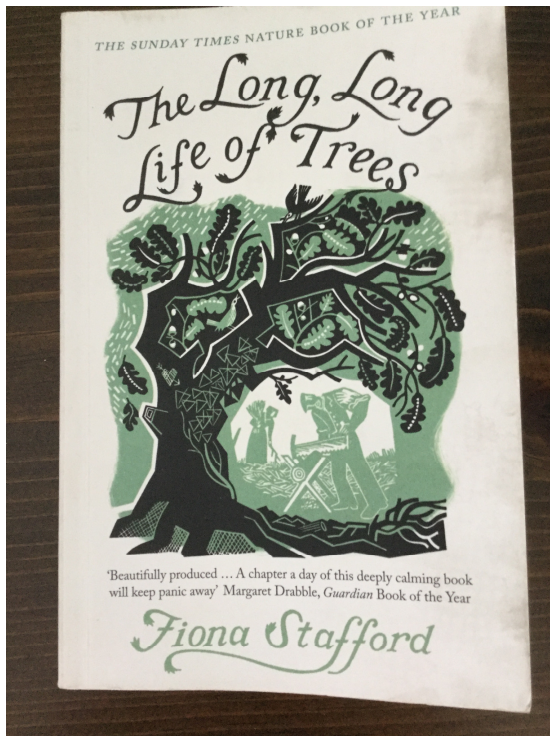
It was nice that one or two more came up so I had a chance to take pictures. One of them made a very small snack, fried in butter with pepper and salt - voilà the recipe. The other one was almost unrecognisable as it had been eaten by snails. I have seen many of the boletus family eaten by snails, particularly the delectable Ceps – a mushroom that we collected in the woods of Holland, when I was a child. These mushrooms were painted by my father, Lucas Peterich (1902 – 1983) The scientific name of this mushroom is *Boletus edulis*, the edible bolete, but that does not imply that there are no other edible boletes. This time I raise the warning finger myself. You have to really know your mushrooms, or have someone guide you, who is in the know.

BOOK REVIEW BY JENNIFER FLOOD

The Long, Long Life of Trees

Fiona Stafford

Yale University Press



A beautifully written and illustrated book, drawing not only on the character and ecology of the trees themselves, but their integral, historical relationship with humans, on a practical level for food, medicine and timber; and also in art, literature, and mythology. A thoroughly enjoyable, informative read giving fresh insight and little known facts on a wide selection of trees.

MORE MUSHROOMS AGAIN!

BY GEORGE PETERICH

It has been my favourite motto for a long time: the more you look – the more you see. A week ago I saw Wooddear mushrooms on a stump of what was an Indian Laurel (*Ficus retusa*) and that was new to me. In Europe they are found on old wood of the Elder tree (*Sambucus nigra*), but here in Bermuda I had found them so far on Poinciana (*Delonix regia*) Jacaranda (*Jacaranda mimosifolia*), and Pride of India (*Melia azedarach*), always on tree stumps and fallen trees, and on dead or sick branches.



The scientific name is *Auricularia auricula* (auricula is the Latin word for earlobe) and they have a number of common names. Looking them up again on the Internet I found another very appropriate name for them: Jelly Ear. When they appear first, which is always after it has rained, they are orange and indeed jellylike. The texture is rubbery. When they are dry they are black. This is how you will find them in the market, but they regain their rubbery texture when rehydrated.

I did not know they were edible until I read Roger Phillips's wonderful book "Wild Food", although I must have eaten them before in soup in Chinese restaurants. You will find them often in the Chinese cuisine – the Chinese are very fond of them – but they also have various medicinal uses. Actually there are two species, *Auricularia auricula* and *A. polytricha* that have different medicinal properties. They are of course commercially grown and the annual production is huge. On a list of mushrooms produced in China in 1990 the Wooddear is in third place, after Shiitake and Oyster mushrooms. The Field Mushroom (*Agaricus campestris*), so well-loved in Europe comes in fourth place.

Trivium #20 by George Peterich

Sometimes the edible part of a local pawpaw may seem less than the seeds, even after removing them carefully. But even the seeds can be used gastronomically! The recipe is a salad dressing that comes from a cookbook from Fiji in the Pacific Ocean, where the biggest and most delightful pawpaws are grown. We have made it for many years.

Take one or two spoonfuls of the seeds and the same amount of finely chopped onion. Add a teaspoon of mustard powder. To this you add malt vinegar and oil and grind it in the kitchen machine. The seeds must be pulverized and this takes a bit of patience. Scrape the sides of the machine from time to time. The result can be used for a long time, if stored in the refrigerator. It is particularly good in potato salad.



The ever-popular Bermuda Pawpaw.

UPCOMING EVENT:

Sunday, March 4th
Rain date March 11th

1:30 pm. Tour of Spittal Pond, led by Lisa Greene.
Meet at eastern end car park. Numbers are limited.

To reserve a spot, please email jgflood@btcnet.bm

Or call Helle Patterson at 293-0163.