



Bermuda Botanical Society

P.O. Box HM 2116, Hamilton, HM JX,
Bermuda

bermudabotanical.org

bdabotanicalsociety@gmail.com

NOVEMBER NEWSLETTER 2024

FROM THE PRESIDENT:

The 2024 AGM went well, with good attendance. Thank you all who turned out. The President's AGM report covered the wide range of activities undertaken by the Society throughout the past year. Mention was also made of upcoming events (see Events section of Newsletter) and thank yous to committee members and others who have helped during 2023 – 2024. It was noted that the transfer of banking and accounts was taking much longer than anticipated with a considerable amount of documentation required by BNTB. Going forward, the Society will be in a better place to make any changes. Particular thanks to member Wendy McLeod for working with BNTB to facilitate these alterations and new Treasurer, Lara DuPlessis for the 2023-2024 Financial Report. The Committee was returned with the welcome addition of Jade Lovell. The MOU with the Parks Department was finally, officially made public on Tuesday November 19th at a media event at the BBG.

See the following link to the Royal Gazette article:

<https://www.royalgazette.com/environment/news/article/20241120/agreement-will-open-avenues-for-botanical-gardens-funding/>

Jennifer

BBS Committee members 2024-2025:

Jennifer Flood - President
Peter Lee - Vice-president
Marlie Powell - Secretary
Lara DuPlessis - Treasurer
Jocelyn Morrison
Marijke Peterich
Jade Lovell



BBS volunteers at the Rose Garden, Botanical Gardens get some tips on pruning roses.

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The Story of Naupaka

Text and photos: Alison Copeland

Beach Naupaka or Hawaiian Half Flower (*Scaevola taccada*) is a woody shrub found on rocky foreshores and sandy beaches of the tropical Pacific and Indian Ocean. It was introduced to Bermuda for coastal ornamental use in the 1980's or 90's, and has since become an increasingly abundant invasive pest.

On a recent trip to the Big Island of Hawai'i, I was really interested to see *Scaevola taccada* in its native habitat. It could be found on beaches and growing directly from the cracks of lava flows along the coast – a hardy plant indeed! It was also interesting that it completely dominates large patches of habitat, excluding all other plants, just like it does in the habitats it has invaded in Bermuda. I had expected it to be a component part of a richer assortment of Pacific coastal plants in its native range, but no, I guess total domination is its growth habit wherever it goes.



Beach Naupaka dominating a sandy shore in Hawai'i



Beach Naupaka growing from a lava flow at Punalu'u Black Sand Beach, Hawai'i

On a visit to the Hawai'i Tropical Botanical Gardens outside Hilo (very highly recommended to anyone visiting the Big Island), I discovered the origin of the name 'Naupaka'. Princess Naupaka was the sister of Pele, the goddess of fire and volcanoes and creator of the Hawaiian islands. Pele had her eye on a young man name Kauai, but he fell in love with her sister Naupaka. In a rage, Pele chased the couple up the mountain with lava, where her other sisters took pity on the couple and turned Kauai into a plant known

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in Hawai'i as Naupaka Kauhiwa or Mountain Naupaka. Further enraged by this intervention, Pele chased Princess Naupaka down the mountain to the sea, where the other sisters turned her into Naupaka Kahakai or Beach Naupaka. Both the Mountain and Beach Naupaka have 'half flowers' with all of the petals growing on one side, to represent the divided couple who become whole again when the flowers of these two plants are brought together.

For more information on Beach Naupaka locally, you can consult the DENR's webpage (<https://environment.bm/beach-naupaka?rq=naupaka>). Also, Beach Naupaka has appeared in the Society's news before, including Marlie Powell's summary of the society's South Shore dune walk in the spring 2022 newsletter and a September 2013 description of it by Niall Aitken. More information of Beach Naupaka's invasiveness can be found here:

<https://doi.org/10.1079/cabicompendium.48817>



The 'half flower' of Beach Naupaka at Warwick Long Bay, Bermuda

Editor's note: The photo below shows our native Beach lobelia (*Scaevola plumieri*). The texture of its leaves is smooth and waxy, compared to the leaves of Naupaka which are covered with soft hairs. The "half-flower" is, as I have just learned, described as fan-like and is a characteristic of its family, Goodeniaceae. It is closely related to the Lobelia family



L. Greene

Memberships

Renewal date was by August 31st 2024. Your support is really important to us as we move forward. Many thanks to those who have already renewed. Really easy through BDATIX! bdatix.bm Membership details are available there.

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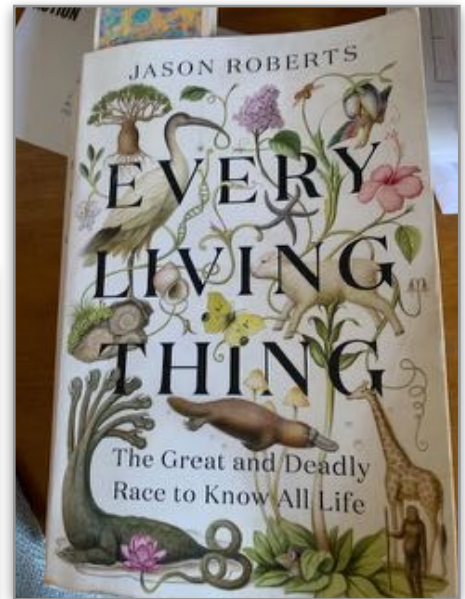
MANSOA alliaceae, garlic vine

Text and photos Jennifer Flood

This glorious vine is in full flower in the QEII park – a member of the Bignonia family, Bignoniaceae, and native to northern South America. Besides being beautiful it is also used in traditional medicine for a variety of ailments including inflammation, fever, colds & flu. All parts are apparently edible and the leaves can be used as a garlic replacement.

And that brings me to Monet's Garden, Giverny, France, where I noticed the blossoms falling from a tree that reminded me of the Bignoniaceae seen in Bermuda. However it turned out to be *Paulownia tomentosa*, which was once placed in the Bignonia family but has since been moved to its own family Paulowniaceae and genus *Paulownia*. Which can all become a bit confusing.

This also ties in very nicely with a book I have just finished reading, '*Every Living Thing* - The Great and Deadly Race to Know All Life', by Jason Roberts. About the lives of Carl Linnaeus – whose binomial nomenclature became the modern system of naming plants, and Georges-Louis Leclerc, Comte de Buffon, whose system was far less rigid and in hindsight is probably turning out to be the better method. Plants now have a list of classifications – Clades, order, family, Genus before arriving at the species binominal name! A truly fascinating read, thoroughly recommend.



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You can help by propagating our native snowberry

Text and photo: Lisa Greene

If you have recently cleared some land, or have a space that needs filling, consider our native snowberry. And if you don't have any need for a new plant, perhaps you'd be interested in propagating some for others. Plant sales are *always* looking for natives and endemics to add to their offerings.

According to The Ladybird Johnson Wildflower Center (https://www.wildflower.org/plants/result.php?id_plant=cha8) our native snowberry (*Chiococca alba*) is suitable for a thick groundcover and is propagated by softwood cuttings.

Further details are provided by EarthOne: "For cuttings, take a healthy stem cutting, dip it in rooting hormone, and plant it in a moist soil mix. Keep the cutting in a warm, humid environment until roots develop."

If you do try propagating it, please let us know of your success (or failures) so we can better advise other wanting to try. And if you don't want to hold onto it for a plant sale, let me know: elgreenebda@icloud.com



Snowberry growing and flowering under a cedar.

Focus on self-seeding plants in Bermuda

Text and photos: Lisa Greene

This is the first in what I hope will be an ongoing series highlighting plants self-seeding in Bermuda. Some of them will be considered invasives, other may be less of a problem. The point is to heighten awareness about which plants are self-seeding and how much of a problem they are currently, might become or may never become. Some plants you may be aware are self-seeding, others perhaps not.

Pentas was a new one for me. It has recently started self-seeding in my garden in St. George's from a purposely planted specimen. Because this introduced ornamental is self-seeding it is now considered naturalized to Bermuda, but I would say that it is not yet invasive and I think it is unlikely to out-compete or over-shade our natives and endemics or more desirable plants - therefore it is unlikely to be classified as "invasive".

You may also see a *Turnera* plant on the right of the photo.. This is self-seeding aggressively in and immediately outside my garden. It has been suggested to me the seedlings may be the result of my native *Turnera* being cross-pollinated by a nearby introduced ornamental *Turnera* cultivar.



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The Ultimate Raised Wicking bed with a Hugel Kulture footnote

Text and photo - Wendy McCleod, illustration supplied

As you've perhaps heard me say before - my garden is grass sitting on bare rock with very little soil top to bottom. For my situation the best way to grow my tomatoes is with a raised bed. My 8 year old galvanized metal raised beds are just beginning to rust out and it's time to replace them. I've put much thought into raised beds version 2.

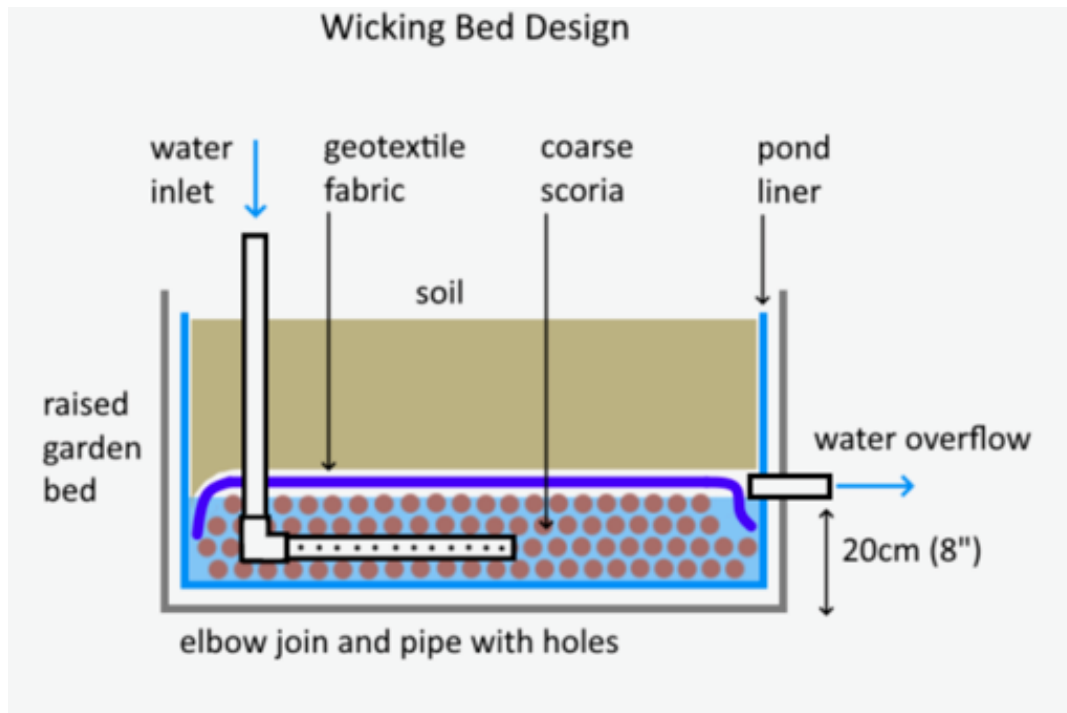
My ideal would be:

- Rectangular - I considered U shaped but didn't see benefit
- 3 ft wide - otherwise its hard to weed the middle
- 10 ft long - I don't think the length is important
- 2 ft high - My back would love to have it taller but its more expensive and more exposed to wind
- Thick walled to retain heat and moisture - I went with plaster coated 6"inch block for durability.
- Its important not to have it too close to trees with thirsty roots
- 6 hrs of morning and midday sun

Most of these criteria were based on a couple of my neighbor's raised beds which are made from concrete block and then faced with bermuda stone rocks. They should last forever! And it's an attractive garden feature. And best of all it kept the soil a little cooler in the heat of summer. However, I also wanted to solve my biggest issue - keeping the veggies watered in August.

Adding the wicking water reservoir

It was timely when my favorite YouTube gardener (link to video at the bottom) did a video on wicking beds which is basically a raised bed with a water reservoir in the bottom. I know wicking reservoirs work because I have a wicking window box from Amazon which keeps my flowers bloom all through summer with just a weekly watering



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We had a heap of sand left over from another project, instead of pond liner we used a roll heavy duty polyethylene moisture barrier. Then we put down 12" of sand, then landscape cloth (must allow water to pass thru but not roots), then layers of soil, manure, wood chips about 16" deep. More is not better, both the sand and the soil are only capable of wicking 12". That leaves 4" of drier soil on the top which means new seedlings need a bit of water to grow down to the damp soil. This helps limit surface evaporation drawing down your reservoir.

Video link for Mark from self sufficient me talking about wicking beds. Mark - by the way - not only has an adorable Aussie accent but he lives near Brisbane which has cool sub tropical winters and hot humid summers. Sound familiar? The caged water tanks he uses can be purchased locally as they are left over from shipping in liquids. I know Bermuda paint has them. <https://www.youtube.com/watch?v=Kd49r3QzTJY>

Final point - when I made raised bed version 1 I had no soil and many tree trunks and branches from clearing. So I had nothing to lose by trying Hugel Kulture. When I dismantled my old raised beds they were filled with wonderful rich soil. I find it amazing because I had filled the beds with 10" thick trunks of cherry and almond which are very hard wood. The soil fungus had done their job!
<https://richsoil.com/hugelkultur/>



Children's Corner - from Jocelyn Morrison

"Leaves 'n Twigs n' Toilet rolls..Let's make a Marionette!"

You will need:

Toilet roll (or paper towel tubes.)

Scissors

Yarn or string

White glue

Small glue gun

Collection of firm sticks : One stick per puppet

(NB: Using a stick as the control for your puppet makes it a Marionette)

A selection of leaves

Pieces of cork and casuarina berries

Recycled lolly sticks

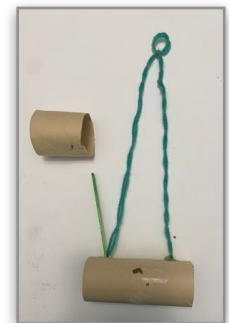
Paint and/or markers



What to do:

1. Your leaf collection needs to be of different sizes and different textures. Eg. Firm, waxy, some large some small.
2. Pick up sturdy twigs for the Marionette control bar approximately 8" long.
3. Assemble all your bits n pieces on a large surface
4. Cut about 2"/5-6cm of a toilet roll tube for the bird's head. (At this stage you can paint or mark the tubes to make whatever bird you have chosen. E.g., Red for Cardinal, blue for a Bluebird, grey for a Grey Catbird. Allow to dry before assembling your bird marionette.)
5. Make one hole in the top of the 'head' to thread one piece of yarn through to hang from the twig .
6. Make a hole on the underside to insert the lolly stick for the neck.
7. On the larger tube (the bird's body) poke a hole for the head's lolly stick to make the neck to join the head to the body.
8. Attach the yarn/string to the stick. Use the hot glue to secure it at the holes on the body. You can adjust the lengths as you work with your puppet. This can be a bit fiddly.
9. Make two holes on the underside of the body to poke the lolly stick legs through.
10. Hot Glue the casuarina berries on the head for the eyes and the pieces of cut cork for its feet.

cont.



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12. Finally for the leaves..... Firm leaves, which are thick and waxy work best here and will not wilt so easily. I chose a Spice leaf for the beak and Philodendron leaves for the wings. Choose them carefully to fit your body. Using the white glue, glue a wing-leaf on one side before gluing the other. Then glue one side of the beak-leaf to fit inside the head-tube.

Tips:

- Use the glue gun to make sure **all** the threads of yarn from the head and body are firm where they meet the tube.
- The leaves will wilt after a few days, but you can easily replace them.

P.S..... You might need some help with this project especially with the hot glue gun, if you use it plus poking holes in the card. The card can be tough!

Thinking time.....



How many plants helped you to make your Marionette?
What plants did they come from? Make a list.

Let us know at: bdabotanicalsociety@gmail.com for a **prize!**

Have fun and experiment!



Cousin Kerry's Veg Pot Pie

Vegetarian, Gluten-Free, Wheat-free ~ Choose local organic ingredients for best results
Makes 4-6 servings, Prep Time = 15 minutes, Bake Time = 20-25 minutes

Ingredients:

6 tbsp butter	Sea salt and pepper to taste
12 oz fresh mushrooms*	3 tbsp arrowroot flour
2 cloves garlic, minced	2 ½ cups vegetable broth
1 cup fresh carrots, chopped	½ cup coconut cream
1 Bermuda onion, chopped	1 x 19oz tin white beans, drained
3 celery stalks, chopped	1 cup frozen green peas
½ tsp marjoram	½ cup grated Parmesan or Romano cheese
½ tsp savoury	1 packet vegetarian puff pastry
1 tsp fresh thyme leaves	

Method: Preheat oven to 400 deg F

1. In a large pot, melt 2 tbsp butter over medium heat.
2. Add mushrooms (*mix of well-flavoured fresh mushrooms, like creminis—cut up larger mushrooms) and cook about 3 minutes, without stirring
3. Reduce heat, add garlic and thyme, and cook for about 2 minutes, set aside .
4. In same pot, melt 3 tbsp butter on medium heat.
5. Add carrots, onions, celery, marjoram, savoury, salt and pepper and cook about 5-7 minutes until veg is becoming tender, stirring occasionally
6. Sprinkle arrowroot over veg, and cook for about 2 minutes
7. Add veg broth, increase heat to medium-high, stirring occasionally until liquid boils and thickens
8. Add cream, beans, peas, grated cheese and adjust seasoning
9. Pour filling into large, buttered casserole dish
10. Roll out pastry and cover dish (edges may hang over a bit)
11. Bake 20 – 25 minutes or until pastry is golden. Allow about 5 minutes to cool before serving.

Variations: Any favourite fresh root veg and any type of fresh mushrooms will work if chopped to size. This centrepiece showstopper looks as good as it tastes. Serve at the table with a tossed green salad.

Contributed by Marlie & Jocelyn Powell, Vegan/Vegetarian chefs at Kingston House B&B on behalf of our cousin, Dr Kerry Abel, a wonderful cook and gardener who lives in Ottawa.

KingstonHouse@BBBermuda.com



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Images and identification from Keren Lomas:



Chinese hat plant



Spearleaf swamp mallow



Events - A varied and interesting selection of activities over the coming months

FUTURE EVENTS

24 Jan/3 Feb Visit by Chris Collins

27 Presentation at LLC, Bda College 12 pm- 1 pm British Gardener Abroad

28 Presentation at BZS 7 pm – Climate Change & Sustainability

(there are also visits to schools, the Bermuda College and a meeting with Parks Staff)

Feb or Mar Alison Copeland will be giving an update on her PhD work: Bda Invasive Species

March visit TBA

April AG Show

May 3rd Trunk Island

Visiting Speaker – Jan-Feb 2025

BBS is delighted to have secured Chris Collins as our annual speaker

next year. Chris has spent a life in horticulture, working at Kew and

Edinburgh Botanical Gardens as well as overseas in Cameroons and Japan. He is presently working at the very prestigious GARDEN ORGANIC based in Coventry UK. You can find out more about Chris at

<https://www.gardenorganic.org.uk/news/10-minutes-with-chris-collins-gos-head-of-horticulture>



We will be looking for drivers, and lunch/dinner hosts during his stay. Marlie Powell has again, very kindly, offered to host him at Kingston House. Further details later.

Email: bdabotanicalsociety@gmail.com subject Visiting Speaker

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