



Native Plants Capricornia

Cultivation - Conservation - Education



NATIVE
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Cultivation
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Education

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New website: <https://nativeplantscapricornia.org.au/>

May 2019 Newsletter No. 213

Next Meeting – Friday 24th May

Steve Elson and John McCabe present:

Recovering Mt Etna

Due to the ongoing efforts of the OGRES (Old Guys Revegetation and Environmental Services) volunteer team to keep weeds under control and water plants through the drought. Steve and John, along with Bob Newby have been dedicated in their efforts to maintain the extensive plantings at Mt Etna. The seedlings were



devastated by wild-fires late last year, but the crew have lined up again to protect the re-growing plants from guinea grass and the like. Steve and John will use lots of photos to discuss their revegetation strategy and learnings for the fire. Photo: Maryanne Smith

6:00 pm tonight - Planning meeting of volunteers for EcoFest Sunday 2 June:

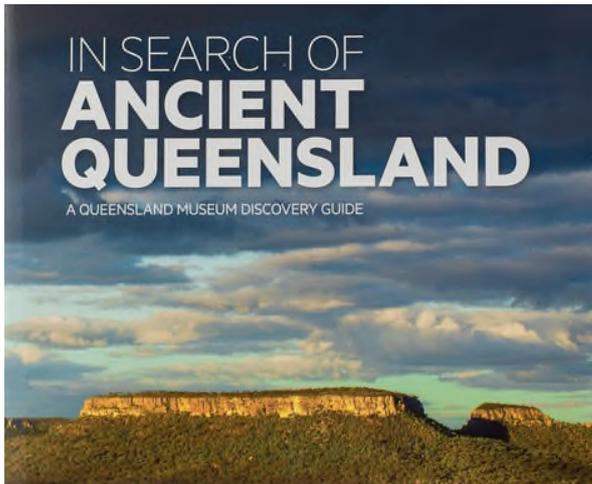
Please come at 6:00 pm to help organise our display for EcoFest at Gladstone's acclaimed Tondoon Botanic Gardens. We have supported Gladstone Branch for some 20(?) years and the folks at Gladstone keep coming back to check out what we bring each year. This year we will flag native plants that host butterfly larvae. It is a big day – we have to be through the gate to set up our display by 7:30 am for 9:00 opening.

Meeting is at 7:00 pm. Turn up hill at the traffic lights on Frenchville Road through the car park. We hope to see you there. Bring along your labelled specimens (if you know them), some cuttings for everyone to identify and any extra native seedlings. We hope to be running a plant raffle so please bring spare seedlings and a couple of spare coins.

Last Meeting – Friday 26th April

In a popular session members shared the books that they have found of value:

- Marian Davies showed a selection of botanical and gardening books and magazines she has enjoyed;

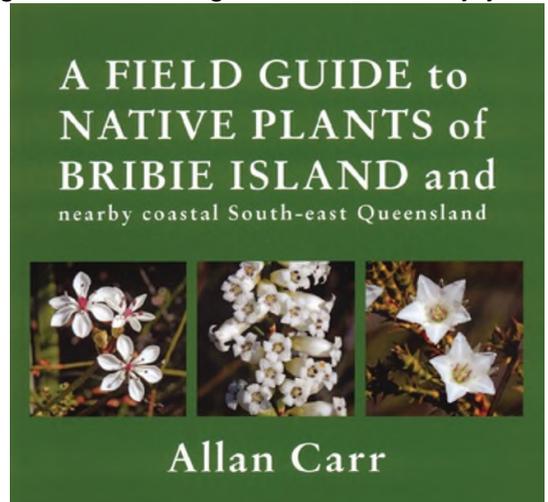


- Phil Esdale spoke on an interesting book he recently found “In search of Ancient Queensland” particularly on the material on Mt. Etna and the Megafauna.

- Pauline Toop mentioned “A Field Guide to Australian Wild Flowers” and “A

Field Guide to Native Plants of Bribie Island” have been very helpful to her.

- Shirley Hopkins mentioned some information about the fund raising to publish the first “Pearson Book”



Next Outing – Sunday 2nd June EcoFest.

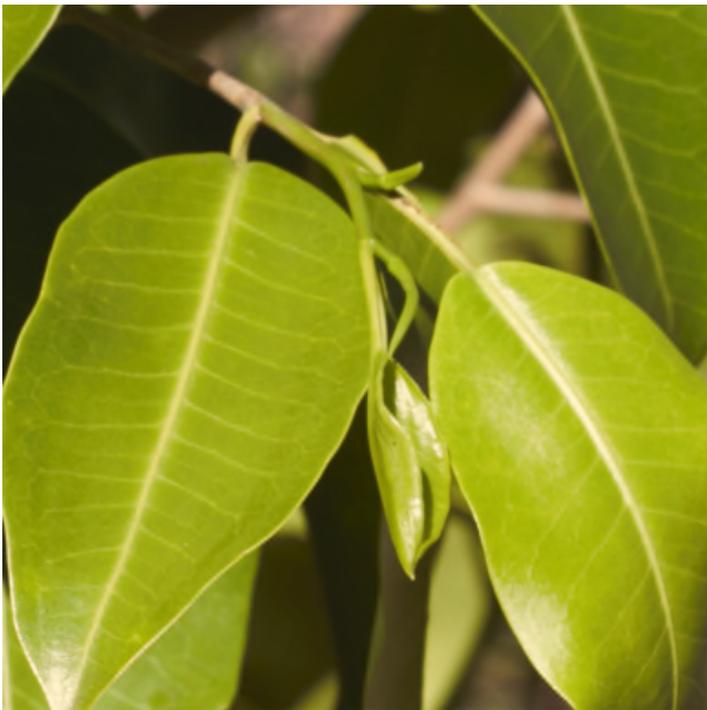
We will have our stall again with lots of books and plants on offer – aimed at host plants for the butterflies recorded around Gladstone. Volunteers needed. Contact Neil on 0439 943 281.

Ecofest Speaker Confirmed

Gladstone Regional Council has confirmed 11-year-old Molly Steer will attend Gladstone's Ecofest as a keynote speaker this year. Molly is credited with Assisting McDonald's to make the decision to stop using plastic straws and is at the forefront of changing local government policies regarding single use plastics. Other keynote speakers include 2019 Gladstone Region Young Citizen of the Year Sid Crawshaw and Tangaroa Blue Foundation's database project officer Jodi Jones. Ecofest will be held at the Tondoon Botanic Gardens on Sunday 2nd June. NPC will be holding a stall. Contact Neil Hoy on 0439 943 281 if you would like to get involved.

May Outing – Sunday 5th May

The May excursion was to Steve Elson and Cheryl Greene's property at Nankin on Emu Park Road. We had a delightful afternoon looking at Steve and Cheryl's extensive plantings grading from the beautiful landscaped environment around their house and garden to the un-grazed eucalypt woodland on the hills where all sorts of remnant plants were coming through after decades of being disadvantaged by cattle grazing. After suffering considerable damage from Cyclone Marcia – damaging winds from both directions under wet conditions – the recovery is impressive. We saw their well-kept fruit orchard on the lower slopes, a very large pond for frog habitat as well as the lush riparian strip along Tungamull Creek with a high diversity of mainly rainforest species and dense stands of Lomandra established in the channel. A big thanks to Steve and Cheryl for making us so welcome!



Wilga - showing the characteristic 'eye-of-a-needle' growth-tip common to Geigeras.



A pair of raised glands on top of leaf surface – helps with identification of one of the milky vines.

Butterfly host plant - CORKY MILK VINE (Secamone elliptica) creating a spiralled trail of bark up a lemon scented gum sapling.



Looking inside the flower of one of the milky vines.



Recovery after cyclone damage.



A totally under-used attractive small tree – Medicine Bush (*Coelospermum reticulatum*) has highly scented flowers followed by massive crops of fruits creating WW3 amongst birds competing for them! Attractive corky trunk (fire resisting?), dense foliage – should be a good fire retardant? Also re-grows from damaged roots exposed by excavation several metres below original ground level (not at their place) so should grow by root cuttings?



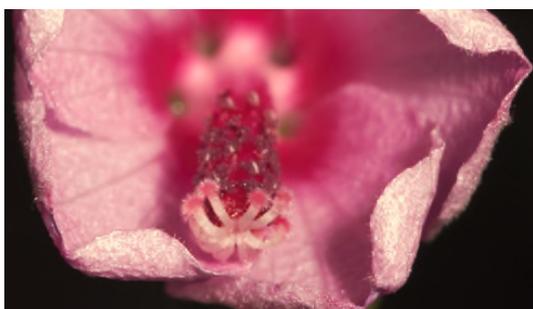
Secamone elliptica fruits



Ants farming aphids (?) on an acacia.



Chain fruit



Hibiscus

Upcoming Events

Sun 2nd June 9am-3pm	Ecofest 2019: Slim your bin with a low waste diet. The Annual Ecofest is being held again at the Gladstone Tondoon Botanic Gardens. Native Plants Capricornia attends with a stall each year. This will also be our outing for June. Contact Neil Hoy on 0439 943 281 if you'd like to get involved.
16th to 20th Sept 2019	16th Australasian Botanic Guides Conference is to be held at the King Park Botanic Gardens in Perth, Western Australia, preceding the ANSPA Biennial Conference. More than 150 guides from botanic gardens around Australia and New Zealand are expected in Perth next year for the conference. The Kings Park Volunteer Guides will host the biennial conference, which was last held in Perth in 2003. The last conference was in Canberra in 2017. The conference, with the theme <i>Beauty, Rich and Rare</i> , will run over four days with events focussed on Kings Park and the Western Australian Botanic Garden.
29th Sept to 4th Oct 2019	Australian Native Plants Society Australia Biennial Conference and Seminar is to be held in Albany, Western Australia from 29 th September to 4 th October 2019, hosted by the members of the Wildflower Society of Western Australia. The Conference themed <i>Blooming Biodiversity</i> is still in the planning stages, but will include a series of tours to and from Albany, the host town, and a variety of day excursions during the conference, taking in native flora in bushland settings as well as gardens and landscaped areas. Since the south-west of Western Australia is known for its pristine bushland, there will be an emphasis of native flora in its natural setting. Further information will be published as planning proceeds.

Our Native Plants Library – available to members to borrow at meetings

Many people (perhaps most) now rely on the internet as a source of information. There is certainly an impressive array of resources including; plant keys (eg Keybase), plant lists (eg Queensland Herbarium), information sheets (eg ATH Australian Tropical Rainforest Plants) etc. The following comments about our library are for those who still like to leaf through a book to root out some information to stem an argument (OK- enough!).

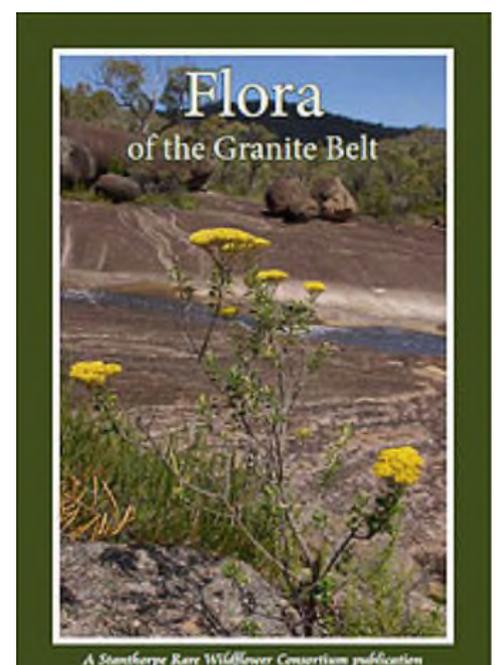
Our library has a wide array of books with a bias towards plant identification and cultivation. The former range from simple photographic records (eg Native Plants of Queensland) through to more technical books. Quite a few books have a regional focus (eg Plants of Central Queensland) so are useful if you are visiting particular areas.

Borrowing rights are extended to all financial members and the library runs on an honesty system. If you wish to borrow a book simply fill in your name and date out on the card inside the front cover of the book and deposit the card in the appropriate tin. Borrowing would typically be for one or two months.

Recent additions include;

Plants of Central Queensland (Anderson) [donated by Cr Fisher]
Census of Queensland Plants (Qld Herbarium) [donated by Phil E]
Flora of the Granite Belt (\$50)
Pilbara Seed Atlas and Field Guide
Field Guide to Native Plants of Bribie Island
Western Queensland Trees and their Timbers [donated by Lew M]
The Australian Native Bee Book
Guide to Bee Genera [donated by Toby Smith].

If there are particular books you think would be useful additions to the library please let a member of the executive know the details. Contributed by Bob Newby.



Amateur naturalist finds new population of endangered wild macadamias

This article has is reproduced from ABC Capricornia, published 19th February 2019.

Thirty-seven new trees of the endangered *Macadamia janseni* species have been found in Bulburin National Park, south of Rockhampton.

Until September last year, the Macadamia Conservation Trust of Australia thought only 90 of the trees existed in the wild. Retired cane farm manager Keith Sarnadsky found the most recent population of janseni plants using a satellite imaging service on the internet.

"It was just a matter of looking for specific details like the colour of a new flush of growth and the habits of the known plants we had," he said.

"I just looked in tributaries of Granite Creek and worked our way upstream, and I think the first group of trees I found was about roughly five kilometres from the first population."



Janseni, the smallest of the macadamia species native to Australia, produce bitter little nuts on an evergreen plant. The species are thought to be the hardiest of the four native to Australia, as they live the furthest north. The discovery was nostalgic for Mr Sarnadsky, who is a keen naturalist in his spare time.

In 1983, he was one of four men who accidentally stumbled across the new species of native macadamia, while on a bushwalk near Agnes Water in Queensland. The men met through their local society for growing Australian plants in Bundaberg.

"We were a group of people that had an actual interest in rainforest plants and natural history in general," Mr Sarnadsky said.

PHOTO: Keith Sarnadsky discovered the new population of plants in the Bulburin National Park, near Miriam Vale in Central Queensland. (Supplied: Ian McConachie).

"The day that they were found, we had been up on top of the range most of the day and when we descended down back towards the Bruce Highway. "We pulled up there and we walked up that particular creek because it was a nice little creek. "That's when Ray found them." Mr Sarnadsky said looking for new plants was hard, but he did it out of passion. "It's a good drive from home ... and it's a rough place to take your car into and there's a lot of strenuous walking through vine scrub," he said. "So yes, I've got a personal commitment to it."

Species under threat

The new discovery has come as a great comfort to the Australian Macadamia Conservation Trust. The only living wild population of janseni are in Bulburin National Park, an hour south of Miriam Vale in Central Queensland. Since the early 2000s, the species have been listed as endangered.

In late 2018, 140 bushfires of swept through the area. Denise Bond, the executive officer of the Macadamia Conservation Trust, said the group were extremely concerned about the species during the emergency. "The fires were within 10 kilometres of the janseni population and that's the kind of catastrophe that we're scared of," she said.

"If it had burnt up the valley they could well have burnt the entire population." The weed known as cat's claw creeper is another threat to the species. As such, efforts to preserve the species have been implemented. Cuttings from 42 plants were taken under licence from the Queensland Government and planted at Gladstone's Tondoon Botanic Gardens. This 'insurance population' are now more than five years old and healthy. Ms Bond said the Conservation Trust had also established two populations in wild habitat which resembled where the species naturally grew.



PHOTO: The janseni species, pictured with a ten cent piece for scale, is thought to be the hardiest of all Australian macadamias. (Supplied: Macadamia Conservation Trust)

Species hold potential for commercial industry

Of the four native Australian macadamia species, three are considered vulnerable and one endangered. Ms Bond said that many people find it difficult to comprehend that macadamias were under threat, considering how many were available on supermarket shelves.

"The cultivated ones are all from just a few strict cultivated ones that have been bred for producing lots of nuts," she said. Ms Bond said though native species were very different to commercial varieties, preserving species like janseni might prove valuable to producers in future breeding.

"One of those characteristics is producing small trees rather than big trees that are harder to manage in orchards," she said. "So, I think that's one way janseni may prove useful to the industry. "But also, it's just valuable as an individual unique species of the Australian biodiversity."

Region's plants at risk: Surviving in a few tiny populations

This article is reproduced from Tuesday 5 March 2019 edition of the Gladstone Observer Newspaper.

THE FATE of an entire plant species endemic to the Gladstone region may be dependent on individual landholders, according to University of Queensland associate professor Dr Rod Fensham.

In December Dr Fensham authored an *Australian Journal of Botany* article identifying priority regions and threats for endangered plants in Australia, including six species in the Gladstone region.

These were the narrow-leaved malletwood (*Rhodamnia angustifolia*), oldenlandia (*Oldenlandia gibsonii*), cossinia (*Cossinia australiana*), Yarwun whitewood (*Atalaya collina*), *Apatophyllum olsenii* and the bulberin nut tree (*Macadamia janseni*).

Dr Fensham said the plants existed in small populations within and close to the Gladstone region.

"For some reason that we can't explain very well, in your part of the world around Gladstone, there's a bunch of species that just locally occur," Dr Fensham said.

"It's probably something to do with a long-term history of past climates and environments that allowed these species to either evolve there or survive there."

He said while *Apatophyllum olsenii* and *Macadamia jansonii* were in protected areas, the *Atalaya collina* was “only known from one property”.

“It’s extinction or survival is totally dependent on one or two landholders,” Dr Fensham said.

He said the plants existed in dry rainforest environments which often had threatened species due to high plant biodiversity in coincidence with intensive land use and threats including the common lantana weed, inbreeding and fire.

He said it was hard to identify the impact an extinction would have on humans and the region’s ecosystems.

“*Macadamia jansonii* may have genetic information that can be used for breeding a better macadamia nut,” he said.

“But for me it’s more just a philosophical and spiritual responsibility of humanity to look after biodiversity.

“Species evolve over millions of years and that depth of time is pretty profound and something we should look after.”



Macadamia jansonii. Photo: Paul Donatu.



Cossinia australiana. Photo: DES.

New Version of Australian Tropical Rainforest Plants Key

It is with great pleasure that we announce the online release of Edition 7 of the interactive identification and information system ‘Australian Tropical Rainforest Plants’ (known as the RFK), available at this link: http://www.canbr.gov.au/cpbr/cd-keys/RFK7/key/RFK7/Media/Html/index_rfk.htm

Edition 7 is a major update of what has been a very long term project. The geographical coverage is significantly extended with the addition of Central East Queensland (CEQ) rainforests south from Townsville to Rockhampton. Other enhancements include 200 additional species, nearly 3000 new images, updates to scientific names and current taxonomic concepts, and fully revised distribution coding.



Australian Tropical Rainforest Plants
EDITION 7 Trees, Shrubs, Vines, Herbs, Grasses, Sedges, Palms, Pandans & Epiphytes

Start Identification

Species Information

- Current name index
- Family index
- Synonym index
- Common name index

About

- Introduction
- Acknowledgements
- About the rainforest
- History of the project

Resources

- Character help notes
- Glossary
- How to use the key
- Feedback



For more information on this release please follow this link: <http://www.canbr.gov.au/cpbr/cd-keys/RFK7/key/RFK7/Media/Html/about.htm>

Next we are working on the release of this version as a LUCID App which will enable use on mobile devices. Feedback or questions regarding the key can be sent to frank.zich@csiro.au

Rainforest plant identification courses have been updated to reflect the new key. Queries about these courses can be directed to stuart.worboys@jcu.edu.au

New Publication for Sale – Tropical Fungi Pocket Guide – arrived! Very showy.

The Tropical Fungi Pocket Guide: Australian Tropical Mushrooms & Other Fungi pre-publication sales are now underway. The Tropical Fungi Pocket Guides are in the final stage of production and will be launched in March 2019 in FNQ, with the Major Event in Innisfail on Friday 15th at 6.30pm. These are a First for Tropical Australia. Right now, I will declare my bias! I am a co-author, but have contributed only a small section of the fungal diversity that is included in these guides. I am very excited by the number of species that are being illustrated for the first time in Australia – boletes, polypores and gilled fungi! This is a product for tourists with an eye for colourful fungi, and students of mycology alike. They are packed with information to enjoy and learn from. The Guides will retail for \$10 each. We have ordered 20 copies so please let us know how many copies you would like.



Featuring the Australian Food Plants Study Group

Some of our Newsletter Readers may not know that a number of 'study groups' exist for various plants families and other plant interests. This month, I have decided to feature a snippet from the *Australia Food Plants Study Group* March newsletter which details a number of food plants from our local area.

Native Raspberry (*Rubus parvifolius*)

Similar to raspberries only with a smaller berry. Eat them fresh, in jams or other preserves. This plant will climb to 1.5m and have spiky thorns, adding to the harvest challenge.



Sagg (*Lomandra longifolia*)

This is a popular landscaping plant that sometimes gets overlooked as a bush food plants. Its young, white shoots can be eaten raw and taste a bit nutty. They can also be baked. This clumping grass can grow in dry or wet conditions up to around 1m high.



Sweet-Scented Kunzea (*Kunzea ambigua*)

A southern Australian species with its northern limit in south east Queensland. Use the leaves as a tasty tea or as a strong flavour in cooking. People say this is the best native plant to add to dishes like roast meat and veggies. Kunzea will grow to 3m on average soils and can be pruned easily to keep it smaller.



Water Ribbons (*Triglochin procera*)

You can eat Water Ribbon's thick, tuberous roots. To prepare them pan fry or roast them. These tubers were a major food source for indigenous folks in Tasmania and the mainland. They grow best in slow moving or still water up to 50cm deep or in really damp ground.



Avalon Fare Catering Company (Gympie) incorporates 'Bush Tucker' recipes into Menu

As I'm cooking there is always a thought of how I could incorporate 'bush tucker' flavours! So whenever possible this is what I do in my business Avalon Fare Catering Company! It's always surprising to hear that so many people are unsure of how to go about this. They hear of lemon myrtle and wattleseed but are tentative to experiment. What I have based my decisions on, is that any dish that goes well with citrus - lemons in particular; will also love lemon myrtle, and any dish that goes well with chocolate and coffee; will also love wattleseed! Fish and chicken traditionally go with lemon - perfect for lemon myrtle! Chocolate mousse loves wattleseed (add some in to the whipped cream too). They are both additions that can blend with both sweet and savoury dishes. Just take a traditional recipe and quickly recreate it in to an Australian fusion result. The flavours are quite strong too, so no need to use a lot.

At the Outdoor Environmental Centres where I cater for school groups, there is always an Indigenous program where we provide taste-testing of lilly pilly jam drops, raw and roasted bunya nuts, and Wattleseed damper. I buy excellent quality wattleseed from 'The Source' wholefoods shop mainly, but there are other outlets if one searches online.

Josephine's Easy No-Fail Wattleseed Damper Recipe

4 cups SR flour in a big bowl

1 full tablespoon Wattleseed and mix through the flour

3 teaspoons macadamia oil (or coconut or olive oil)

1 cup of water (you may need a little more or less)

Mix into a dough and spread out on lined, greased tray to cook in hot oven 200 degrees or over the fire in a camp oven until golden brown and cooked in the middle when tested.

The secret to getting perfect dough is to add more liquid if still and more flour if too wet, bind quickly and keep your fingers floured as you work!

Happy experimenting with these two bush tucker foods!
Contributed by Josephine Frost.



Why the big mitigation bankers are embracing ecological restoration

This article is reproduced from GreenBiz, published on 24th August 2017.

Ask 12 people what mitigation banking is, and you'll probably get 12 different answers — few if any of which would identify it as a key segment of the \$25-billion ecological restoration economy that funnels money into the restoration of streams, wetlands and habitats while supporting over 200,000 jobs.

"Mitigation banking is confusing," said Sara Johnson, an attorney at Hirschler Fleischer law firm. "Your name is your biggest external communication and you don't want to immediately explain a technical concept when advocating on Capitol Hill."

Don Ross, founder of a restoration company in Florida called EarthBalance, agreed, saying it isn't easy to begin a presentation by saying, "We're not really a bank."

In an effort to encourage engagement with stakeholders and ultimately raise the profile of mitigation banking, several practitioners decided to give the industry's most prominent organization a makeover. In early March, the National Mitigation Banking Association officially rebranded to become the Ecological Restoration Business Association (ERBA), of which Johnson is executive director.

"We ultimately came to the Ecological Restoration Business Association after a lot of conversation around a need to move to reflecting the broader sector that mitigation banking is a component of," Johnson explained. "Ecological restoration is the public benefit that our private sector industry is providing, so that's what we immediately want to message in our name."

"The association will now represent the interests of broader industry segments, such as consultants, engineers, landowners, contractors, corporations, nurseries, NGOs and resource agencies," said George Kelly, chief markets officer at Resource Environmental Solutions, a huge company in the restoration space.

Not everyone is happy with this new image. Smaller bankers and some past NMBA presidents and officers felt the rebranding sidelined their key interests, so they collaborated to form another industry group called the National Environmental Banking Association (NEBA).

"ERBA has a broader focus on the bigger restoration industry," said Donna Collier, founder of Valencia Wetland Trust and a past secretary at NMBA and now chairwoman of NEBA. "They took 'banking' out of their name, and we have a lot of bankers that felt threatened. We felt like we needed to maintain our support of the banking industry, so that's what we do."

Read the full story [here](#).



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