

# The North-Eastern Naturalist

Issue 180 July 2010

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**IT IS THE MISSION OF THIS CLUB to encourage the study, appreciation and preservation of our natural and cultural environment, the animals, plants, geology and landforms, including those of the coastal and marine areas in the North East region of Tasmania.**

**The Club conducts outings on the second Saturday of the month.**

**JULY 10**

**MT. WILLIAM + MUSSELROE BAY**

This will be an exploratory outing, climbing the little hill which is Mt. William, exploring the river's entrance and a beach walk. Meet at the Ranger station/ information bay on the Musselroe Road at 10am. **Ring Lou on 63560381 after ABC weather 7.30 Friday night if intending to come.**

**AUGUST 14**

**ANNUAL GENERAL MEETING + GUEST SPEAKER**

Jill van den Bosch will host the AGM at 311 East Minstone Road, Scottsdale.  
Meet at 11am for meeting. Bring lunch to share. Speaker to be announced.

**SEPTEMBER 11**

**BRID RIVER RESERVE - DUNCRAGGIN HILL**

An easy 6km. forest walk in the Duncraggen Hill area between Scottsdale and Bridport. Meet at 10 am at the junction of the Duncraggen Road and the Bridport Road, opposite Gillespies' Sawmill 9kms from Bridport and 11 km's from Scottsdale . Contact person— Mike Douglas 63561243

**OCTOBER 9**

**CUCKOO FALLS—**

A three hour return walk on a marked track. Easy walking to begin with, but then a steeper section climbing up to the Falls. Meet at 10am at the junction of Tonganah Road and the Tasman Highway, five or six kms. east of Scottsdale. Carry lunch and wear sturdy footwear .  
Contact person: Lou Brooker 63560381

**NOVEMBER 13**

**REVEGATION PROJECTS—ST. HELENS AREA**

Visit the old Argonaut Mine site and see and hear about the restoration project there from Natalie Tapson, Horticultural Botanist with the Royal Tasmanian Botanical Gardens. After lunch, we visit Skyline Tier and see and hear about the restoration project there with Project Co-ordinator Todd Dudley. More info.about the projects, next page. Meet in car park on St. Helen's Waterfront near Skate Park at 10 am.

**DECEMBER 18**

**BASIC TREE IDENTIFICATION - BRIDPORT.**

The author of the EucaFlip and the TreeFlip, Rob Wiltshire, will lead this outing in the Bridport area. We will investigate the exact sites in the meantime and can car-pool on the day. Meet 10am in the car -park on the Esplanade opposite the RSL. Contact person: Jay Wilson 63561512.

## SNIPPETS and MAIL

### Editor's Apology.

I have to admit, I was so excited when Ross Coad's picture page of our Cape Barren Trip came through for the last newsletter, that I forgot to acknowledge it.

My humblest apologies to Ross. I truly appreciate the time and effort put into presenting his pictures in that form. It looked good, don't you agree?

### Condolences

Our sincere condolences go to Rosemary who lost her life partner recently.

### More About The Restore Skyline Tier Project :

A few years ago, the **North East Bioregional Network** negotiated with Rayonier to bring 260ha of ex-pine-plantation back to native forest. This has involved weeding each area and then allowing natural revegetation to take place. The Network team will be assisted by a Green Corps team of ten local 17-20 year olds who will work for six months on this and other projects in the area. Working bees for locals are held regularly. Todd Dudley has been the driving force behind this project.

### More About Royal Tasmanian Botanical Gardens Rare and Threatened Species Restoration.

The RTBG and TEMCO have a ten year collaborative history working with rare and threatened Tasmanian plants. In the beginning, Davies' Wax Flower, *Phebalium davessii*, which was rare, unreserved and threatened by changes in land use, was propagated by the RTBG for a community planting in St. Helens. This project generated great enthusiasm.

Grants from the Tasmanian Minerals Council and Mineral Resources Tasmania have made further development and research possible. Part of this has been field trials using the Round Leafed Mint Bush, *Prostanthera rotundifolia*, again a rare and threatened species in a revegetation trial at the old Argonaut tin mine site near St. Helens. This trial was established in 2004 and to date has been very successful.

### News From Life Member. [by email]

Dear Louise,

As a past member of the NE Naturalist's since it's start some 40 odd years ago I follow with great interest the activities and other information through your regular newsletter.

I left the N.E. in 1976 and settled in Mount Gambier SA, I retired in 1989 and still live in Mt G.

I retained my interest in environmental matters through Field Nats and the University of the Third Age (=retirement). Unfortunately I had a few health problems curtailing physical activities. My wife and I look back at our wonderful life in Tas. and its marvellous scenery. We enjoyed the many outings and meetings of the NE Naturalists and I am proud and glad that you still have such a viable and wide-spread membership and diverse interests. I am truly thankful for your generous donation of the newsletter which I can assure you is read avidly, I am sorry that we are unable to see you in person, we wish you well and ask you to pass on our greetings to the members who remember us.

yours truly,

Hans and Mieke Dorgelo

### BONE - Bird Observers North East.

This new group with its base in St. Helens holds meetings on the first Wednesday of each month., and is running a program on shorebird conservation in the area. It will initially focus on identification skills and survey methods leading into the winter shore-

bird counts (and of course a little snack afterwards).

Please spread the word around and forward this message to anyone you think may be interested.

Any queries ? Ring Liz Znidersic on 0409 123 322.

### Letter from North East Bioregional Network

The North East Bioregional Network (NEBN) would like to take this opportunity to inform you/your organisation that we are attempting to develop a sustainable land use plan (LUP) for north-eastern Tasmania. The NEBN is a North East Tasmania based ENGO that supports a consistent ecologically based approach to conservation and planning.

This land use plan is being developed in conjunction with a small team of experts and partner ENGO's. The impetus for establishing this project is that NEBN believes that sustainable development should be explicitly based on ecological principles – but that there is little understanding of what 'sustainable development' actually means. This land use plan is an attempt to address this question in a practical way.

With development and other pressures such as climate change and recreational use increasing, the NEBN considers it is important to manage land use in a way that both enhances and restores conservation values. That is, taking a proactive rather than reactive management approach.

Current land use planning in Tasmania fails to adequately integrate ecological factors into planning for public and private land tenures. This study is attempting to fill the gap in this knowledge, utilising the Conservation Action Planning methodology.

This is a rigorous and established scientific process that has been successfully used by conservation ENGO's internationally, as well as here in Tasmania. This assessment process will provide a detailed analysis of the landscape, identify natural values and provide recommendations (on a holistic basis) of how the ecological health of the landscape can be maintained and improved in the long term.

To date in Tasmania, no detailed planning and natural values assessment has been undertaken which looks at all land uses/tenures, threats and opportunities. As such, this land use plan will strive to fill a gap in current land use and conservation planning and understanding.

Funding for this project is limited, so any expertise or resources that could be contributed to this case study would be welcomed. Please contact us if you would like any further information about the project.

Yours sincerely,

Todd Dudley phone: 6376 1049

Email: [teloopa\\_tas@yahoo.com.au](mailto:teloopa_tas@yahoo.com.au)

### APRIL OUTING - OLD BOOBYALLA PORT WATERHOUSE.

The pictures tell the story.....a very leisurely day hearing about the area as it was in the early 1800's, when Boobyalla as a port was thrumming with activity. A big thankyou to Jeff Jennings for sharing his stories; we gained really valuable insights into the history of the North East. Here we are imagining ourselves on the verandah of the Caledonian Hotel

## THE BIRDS OF POLICEMANS POINT

We wondered when we planned this outing in the middle of March, whether it might be too late for the migratory shore birds. But on the contrary, this spot surprised us with its diversity. We are at the entrance to Anson's Bay, at Policeman's Point, and after a lazy, staggered start, we finally step onto the beach at about 11am.

On the opposite side of the river to us, and roosting together in a large group are some twenty or so Caspian and Crested terns, their bellies full from a morning's aerobatic diving and feeding on the incoming tide. The Caspian, the largest tern in the world is easily identified by its big red bill and its black crown and legs. The Crested, a little smaller, also has a black crown but has a slight crest at the back of its head. Its bill is yellow.

From her kayak the next day, Pam was to see a tern diving right in front of her; it picked a fish out of the water, flew up with it and then twice dropped it and caught it again. Was it playing, or was this a way of killing its prey?

Our new friend and leader for the day, is Liz Znidersic. Shore birds are her passion. She shares some good news about a project carried out at Scamander last spring, where some temporary fencing was set up to protect the nests of the resident Fairy and Little terns. Somehow it was realised this was a safe haven and was used by other birds as well.

There are the usual jokes about terns. Were these good terns? Did one deserve another? After they flew away was the remaining one called a left tern? Oh dear!

We walk forward fifty metres!

At the water's edge, the interface of the channel with the sea, we see red necked stints "stitching" back and forth poking their bills into the sand for food. There is another group of them on our side of the river. Unusually, these birds are feeding on the bio-film which coats the rocks, a phenomena which has only recently been recorded. This little bird measuring only 14cm from bill-tip to the end of its tail, completes a journey from Northern Siberia where it breeds, to these southern coastlines to feed. Amazing!

And we walk forward another fifty metres!

The pied oyster catchers are resting on the sand; there's a couple of sooty oyster catchers amongst the rocks. There's a black-faced cormorant and a kelp gull "on the wing".

Then, before we get to the ocean beach, someone yells out "Liz, come and look at this". And we go **back** a hundred metres to see some inconspicuous little grey birds on the sandbar on the other side of the channel, almost opposite where we'd first come onto the beach. This is VERY EXCITING! Of all the migratory shorebirds, this one is probably less common and often only seen on Tasmania's north eastern beaches. Like the red-necked stint, the sanderling is an Arctic breeder, flying from 3,000—10,000km to its feeding grounds. It prefers these open sandy beaches where it chases the waves in and out darting after insects, larvae and sand worms. In all, we see 26 of these tiny birds.

After this excitement, we walk a fair way before we see our next bird - 300 metres at least.

Around the point and on the ocean beach now and something catches our eye amongst the seaweed that's banked up in the corner of the bay. Bits of seaweed are flying here and there and its difficult at first to see what's happening. Our binoculars settle on some little ruddy turnstones. As their name suggests this behaviour is not uncommon because as well as turning stones, they use their sharp wedge-shaped bill to flip shells, driftwood and seaweed in search of food. Another long distance traveller, little was known about their route because they were too small to carry satellite transmitters. But recently researchers obtained 1.1g geolocators and these were attached to six Victorian turnstones. It was discovered that four of them had flown non-stop from Victoria to Taiwan in just over six days. That's a distance of 7600 km's. Turnstones are great to watch in flight, spectacular in their small flocks as they all change direction together revealing their beautiful wing patterns.

By now, it is obvious to the residents of Policeman's Point, that we are bird watchers. None of us are really hardcore "twitchers", people who would drop everything and go halfway across the continent to see a bird they had never seen before. [Or would you, Liz?] But all of us are gaining a serious respect for these little birds, and realising how critical it is to protect their feeding sites. Birds Tasmania sponsors "Dogs' Breakfasts" - an education program encouraging dog owners to control dogs on beaches. The other big threat to shorebirds in Tasmania is the use of 4WD on beaches.

In May this year, World Migratory Bird Day took place for the fifth consecutive year to raise awareness. Populations of shorebirds are plummeting world-wide as feeding grounds are demolished by 'development'. The draining of the Saemangeum Wetland along South Korea's west coast is one such example. Feeding grounds along the shores of the Yellow Sea have recently been destroyed. Birds arriving after long flights to these places are starving in large numbers.

Liz's passion for shorebirds is catching. Its hard not to share her enthusiasm. We thank her for leading the outing.

# REPORTS

## FEDERATION WEEKEND—WELDBOROUGH—22ND 23RD MAY.

Everyone else in Tasmania had a cold weekend, but those who went to Weldborough for the Hidden Treasures fungi forays, had a **freezing** weekend. Some slept in tents and some slept in cars, others were lucky enough to have a cottage. But the cold didn't seem to lessen the



enjoyment for any of those who attended.

The frost hadn't even started to thaw as we headed up to the Blue Tier on Saturday morning. Each of the three groups was led by a mycologist. They had been in Weldborough for the week leading up to this weekend and had documented and made herbarium collections of the fungal treasures of the Blue Tier. They displayed amazing patience with us 'novices' who kept asking them to repeat names and spellings for our notes and photos.

The Sun Flats Road group didn't seem to go far [a bit like bird watching, really] We stood around in the wet rainforest until our fingers and toes froze, then we went out into the sun for five minutes to warm up and then back into the same bit of forest. Such was the diversity of fungi there, that in an hour of looking in this area of about 50 m<sup>2</sup> we found about 35 species. It was the same the next day at Emu Flats Road.

The whole undertaking was huge for Sarah Lloyd and Ron Nagorka. Not only were they hosts to ten mycologists during the week, but also a crowd of field nats. for the weekend. No-one was disappointed - it was a brilliant weekend.

## THE TRAIL OF THE TIN DRAGON—JUNE OUTING—BRANXHOLM.

It was at least eight years since we had visited Chris and Graeme and seen the beginnings of their project to build accommodation cabins on their land just behind Branxholm. I doubt they have had a day's rest since then and the fruits of their labours are now paying off. Both paid tribute to the other for all the hard work and the team work was obvious.

We began our visit at the interpretation cabin which was once on the site of the Derby Tin Mine Centre. Here, the history of Chinese involvement in tin mining is documented since the discovery of tin in Branxholm in 1873 through the peak population numbers of 1200 Chinese, to around 1901 when only 39 remained because they could no longer become naturalised in Tasmania.

The "8" kilometre trek [measuring 12 km on a GPS] took us along the races, sometimes walking in the races, sometimes on top of the painstakingly constructed stone walls built to carry the water needed for sluicing the tin. We didn't complain about the distance because there was something along the way of interest for everyone. The mining history buffs were satisfied as were the photographers, for although the peak of the fungi season was over, there were still some marvellous specimens remaining.

Thankyou Graeme, Christine and James for a wonderful day and congratulations on such a brilliant project.



# BIRD SURVEYS ON TASMAN ISLAND

by Liz Znidarsic

During the period of 28 May to 1 June 2010, I visited Tasman Island to undertake bird surveys on behalf of Birds Tasmania. The surveys were and will continue to be a contribution from a community group (Birds Tasmania) to the Tasman Island Natural Values Restoration Project, which is currently focussed on a Cat Eradication Program conducted by the Tasmanian Parks and Wildlife Service with support from Resource Management and Conservation Branch of DPIPWE. I was fortunate to be with a very experienced and knowledgeable team focused on the eradication; Mark Holdsworth (DPIPWE), Sue Robinson (DPIPWE) and her two dogs (Clay and Shark), Matt Pauza (Fox Eradication Branch DPIPWE) and Nick Whitely (PWS).

Tasman Island (43°14 S 148°05 E) is situated on the southeast tip of the Tasman Peninsula. The island is approximately 1.6km long and 1km wide with a perimeter of dolerite cliffs and steep grassy boulder fields that rise approximately 300m to the central undulating plateau. Aboriginal artefacts have been found on the island, however much of the pre-European history is unknown. The island was inhabited by Europeans when the lighthouse was commissioned in 1906 until 1977. The lighthouse now operates automatically with solar power. Cats were originally kept as pets during the 1940s and subsequently established a feral population.

Eradication of the cats was attempted during the 1940s and 1977 without continued effort or success. The current program, which is managed by Luke Gadd from PWS, incorporates a multi-phased approach to the eradication from 2009-2011, with ongoing monitoring to ensure positive outcomes. In early May 2010, aerial and ground baiting using 'Curiosity™' baits containing the toxin para-aminopropiophenone [PAPP] commenced, followed by trapping and hunting with the aid of remote-sensing cameras, spotlighting and trained cat-detecting dogs. PAPP is regarded as a humane means of euthanizing the cats with an effect similar to that of carbon monoxide poisoning.

Tasman Island is an important seabird breeding site. The fairy prion population was estimated to be between 300,000 and 700,000 breeding pairs in 1979, and is the largest population in Tasmania and possibly Australia. Feral cats are currently the only introduced mammal on Tasman Island. The impact of the cats on breeding seabirds has been well highlighted with caches of fairy prion carcasses found in caves on the island. Fairy prions, and short-tailed and sooty shearwaters use the crevices and caves to burrow into the soft soil on the dolerite boulder, grassy tussock and *Poa poiformis* areas for nesting habitat. The impact of the feral cats is devastating, considering that these three species of seabirds lay only egg per year. Feral cats are 'surplus killers', killing more than they can eat. On Tasman Island, it is estimated that in excess of 50,000 birds are killed annually by the feral cats.

At the time of the initial survey, the majority of seabirds had left the island in a migratory or dispersive effort, therefore my main focus was on the bush birds and to familiarise myself with the seabird breeding areas for future visits.

Surveying methods comprised Atlas 2ha, incidental observations and acoustic surveys with a Zoom digital recorder. Due to poor weather conditions during the first two days, surveying was difficult and acoustic surveys were conducted only when the wind speeds were minimal. Results from the combined surveying techniques resulted in 25 species being identified. Species recorded comprise fairy prion, Shy albatross, Buller's albatross, Australasian gannet, black-faced cormorant, white-bellied sea eagle, peregrine falcon, Lewin's rail, crested tern, yellow-tailed black cockatoo, green rosella, Southern boobook, thornbill spp. (unable to identify through quick visual and audio means), little wattlebird, yellow-throated, crescent and New Holland honeyeaters, flame robin, forest raven, common skylark, European goldfinch, European greenfinch, silvereye, common blackbird and common starling.

High numbers (100s) of crescent honeyeaters were seen and heard all over the plateau and along cliff faces in *Banksia marginata* and other shrubs. Numerous calls of Lewin's rails in the sedge-land and grassland areas of the plateau were of great note. This species was originally identified on the island during The Hamish Saunders Program 2005 surveys. Despite the ongoing presence of cats since then, there is still a population indicative of at least four birds. A positive thornbill identification was made from a very fleeting sight and audio recording, however whether the species was a brown or a Tasmanian was inconclusive. In one early evening acoustic survey, a Southern boobook was recorded with a cat-like "brreeow" call which is so different to the well known "mo-poke" call. The acoustic recordings under Sarah Lloyd's 'A Sound Idea' program provided another level of knowledge to surveying areas and analysing call data.

Considering the relatively small size of the island (120 hectares), a high species diversity was currently present within the island's main vegetation communities of grassland, she-oak woodland, healthy scrub, regenerating scrub, coastal mosaic and sedgeland. Some of the dominant species include *Banksia marginata*, *Allocasuarina crassa*, *A. verticillata*, *Poa poiformis*, *Leptospermum scoparium*, *Cassinia aculeate* and *Rhagodia candolleana*. The birds currently present are a combination of resident and transient species. Such close proximity to the mainland of Tasmania (500m), enables species to fly back and forth easily.

No cats had been captured on the island since mid May. Apart from possible cat eye shine while spot lighting in late May, it appears the program has started with positive outcomes by immediately decreasing cat numbers. The ongoing management of Tasman Island will ensure that the natural diversity of the island is conserved and returned to as natural state as possible within environmental conditions. Outcomes of the eradication program are predicted to include an increased breeding success rate and survival rate of the three burrowing seabirds and increased populations of other ground-nesting birds such as the Lewin's rail. There is the possibility that other species that presently do not use the island such as little penguins will do so in the future. Invertebrate species such as the endemic Tasman Island Cricket and reptile species populations would also increase with decreased predation risk.

The program has brought about an exciting future for the island and the conservation of the nesting seabird species. Thank you to Luke Gadd and the eradication team for the opportunity to experience and assist with the preservation of Tasman Island. Also, thank you to Sarah Lloyd for species identification on acoustic surveys.

## FINDING NAUTILUS

by Lou Brooker

It's not possible to visit Flinders or Cape Barren Island at certain times of the year, without getting caught up in the magic of the paper nautilus, as I found out in June when I had the chance of another visit to C.B.I. A 'perfect' nautilus shell is much prized by beachcombers, indeed there is a lucrative trade in these shells, as I found out when I began to unravel the truth from the fiction. This task was not made easier by reports headed "When a Paper Nautilus is not a nautilus"<sup>1</sup>, and quotes like... "the taxonomy of family Argonautidae is a mess."<sup>2</sup> But I did find one website where things were made a little clearer. \*

Having survived relatively unchanged for 500 million years, nautiluses are often referred to as "living fossils". Nautiloids were much more extensive and varied 200 million years ago; many were straight shelled and some were over 2.5 metres in size. The name 'Nautilus' originally referred to the Argonauta otherwise known as the Paper Nautilus. Aristotle postulated that the Argonaut used the shell to sail across the surface of the sea.

Argonauts are a special group of free swimming octopuses inhabiting the ocean. The famous brittle shell is produced by the female to house her eggs. In the water, the Paper-Nautilus, is always excessively thin, white and imperfectly calcified, so as to be slightly flexible when fresh. The shell is totally unconnected to the *Octopus* inhabiting it. Like all the *Octopoda*, the Argonauts are generally nocturnal, and inhabit the high seas, feeding on various floating small animals; rarely coming near the surface by day, except in calm weather. The females only approach the shallow waters of the coast in summer time, when the eggs are developed.

The following quote is a story told by Frederick McCoy of Museum Victoria about an Argonaut which was kept alive for some time in a tub of sea water. It gives an interesting insight into Argonaut behaviour....

"Nothing could be more ludicrously interesting than the vigilant look-out which the creature maintained, watching suspiciously, with its large perfect eyes just peeping over the edge of the shell in which it nestled, with the arms often curled inside along with the body when at rest; at other times they hung outside or streamed in a close group in front, when the animal and shell darted backwards by shooting water out of the funnel in front of the head.

Occasionally it crawled about on the bottom, head downwards, with the shell covering over its upper part. When greatly frightened it abandoned its shell and darted away with great velocity, but got back into it again when left alone. The colours varied in a few seconds from the palest pink to rich madder purple, according apparently to the will or temper of the creature."

You might have recently seen, as I did, an article on the ABC telling about two scientists from Museum Victoria who have for the first time observed *Argonauta argo* in the wild in the Sea of Japan.

Julian Finn and Mark Norman, these two Australian scientists, say that females actively fill their shells with air, and then jet down into the water column, where the air compresses as water pressure increases with depth. This allows argonauts to remain neutrally buoyant at depths of up to 10 metres, with the volume of air in their shells exactly compensating for their weight.

This is part of a transcript explaining the experiment which gave Finn and Norman this information<sup>3</sup>:

.... "Finn took three female argonauts captured by Japanese fishermen scuba diving in Okidomari Harbour on the western coast of Honshu, and released them at depths of 2-7 metres. Prior to release, the shells were depleted of air. All three argonauts jetted to the surface and rocked their shells forward to 'gulp' air, which they then sealed in their shells with specially-adapted tentacles. The argonauts then dived until buoyancy from the trapped, compressed air cancelled their weight. To my delight the argonauts immediately put to rest decades of conflicting opinions, demonstrating their expert ability at obtaining and managing surface-acquired air," says Finn. "The Female argonauts released with no air in their shells flailed from side-to-side when swimming, struggling to maintain vertical orientation. Argonauts released with ample air in their shells at the water surface displayed no difficulty in diving to depth."

I didn't get to the bottom of the story that Argonaut shells are only to be found once every seven years. They were certainly abundant this year. I'm treating mine as a precious, rare shell. I know they're available on ebay for \$100, but nothing surpasses the excitement of spotting a specimen jammed into a crack between two boulders covered with seaweed, on a windswept beach miles from any human habitation, and finding out its in perfect condition.

\* argosearch.org.au

<sup>1</sup>, Webpage : Invertebrata 9b items.

<sup>2</sup>, webpage of the Hermon Slade Foundation

<sup>3</sup>, ABC Science May 14, 2010 www.abc.net.au

Photos by Julian Finn to show the difference between the Argonaut [left] and the Nautilus. *Argonauta nodosus* is the species most likely to be found in the Furneaux Islands.



# STIMULATING BREWS FROM THE HOP BUSHES

BY PHIL WATSON [reprinted here with the author's permission]

Hop Bushes or more endearingly called "Dods" (*Dodonaea viscosa* spp.), provide an interesting brew of enthralling plant characteristics, uses and interrelationships. Their robustness enables them to flourish across a diverse range of open vegetation communities spanning areas of continental Africa, America, Australia and India. With its natural habitat spreading from exposed coastal fore dunes and cliffs, to barren rocky ridges and grassy woodlands communities, it has earned a reputation as a hardy, water miser. Combined with its plant uses and attractive, vividly coloured 3 to 4 winged fruits, glossy leaves and natural hedging ability, it deserves a recent increase in popularity as a desirable landscape and revegetation plant.

**Subspecies of *Dodonaea viscosa* have distinctive characteristics** *Dodonaea viscosa* spp. has a series of subspecies occurring in open woodlands in SE Australia. Their plant size, distinctive leaf shape and habitat range helps to distinguish between them. Key examples include *Dodonaea viscosa* ssp *viscosa* (large, nearly stalkless, elliptical leaf), robust *Dodonaea viscosa* ssp *spathulata*, (spoon shaped leaf), the attractive *Dodonaea viscosa* ssp *angustissima*, (delicate linear leaves), the arid area *Dodonaea viscosa* ssp *mucronata* (pointy tipped spoon-shape leaves) and the appealing purple leafed screening or accent favourite from New Zealand *Dodonaea viscosa* ssp *purpurea*.

Recently variegated and prostrate forms of *Dodonaea viscosa* ssp *spathulata* have proved very popular as landscape features and accent plants. All the above species form excellent water wise informal screens or formal hedges (biennial pruning necessary). Some of the most classic forms of these plants can be enjoyed in very exposed sites such as sea cliffs or frontal dunes where the wind shearing effect has resulted in unique and photogenic botanical marvels.

**Hop Bushes are unusual members of the Soapberry family** There are 66 *Dodonaea* species, elevating it to being the largest genus of the 150 genera Soapberry family Sapindaceae, ("Sapo" Latin for soap). Many family members contain a saponin glycoside, which provides plants with a useful detergent-like foaming attribute acting to reduce the water tension when shaken under water. In contrast to open dry woodlands where Hop Bushes flourish, most of the family members are found in closed, tropical forests, being prized for their well known fruits. These include the luscious Lychee *Litchi chinensis* and Rambutan *Nephaleum lappaceum* along with the sticky sweet Asian delights from the Tamarind seed pods *Tamarinus indica*. All these tropical members attract the pollination services of a variety of insects and birds by boldly marketing their flowers with alluring nectaries, scents and colours. Their irresistible fruits ensure the forest fruit eaters disperse their seeds far and wide.

**Dry, exposed woodland communities enhances their long term survival** In contrast to the families' main pollination process, the Hop Bush is, surprisingly, a wind pollinated plant. The *Dodonaea* floral structure, colour and lack of scent provide cryptic clues in this regard and help in understanding why it flourishes in dry, exposed vegetation communities. Missing from the flowers are the obvious bold coloured petals, sweet chalices of nectar or alluring scents essential for the tropical family members to advertise their rewards in exchange for insect or bird pollination services. Closer observation reveals that the flowers are at the ends of branches with their stigmas having a broad sticky collecting surface ideal for catching airborne pollen. With disproportionate numbers of anthers (relative to stigmas) they are capable of wafting clouds of fine yellow pollen into the breeze where they can travel some two kilometres during their pollination season. As obvious wind pollinated flowers they thrive in exposed, dry landscapes allowing the wind to do its job.

By establishing itself in prominent single species groves within low diversity, open plant assemblages, Hop Bushes, like other wind pollinated native trees and shrubs, such as She-oak (*Allocasuarina verticillata*) and North-Esk Pine (*Callitris oblonga*) improve their chances that the pollen will reach its target. Like Hop Bushes, these species are dioecious having male and female flowers on separate plants. It is also interesting to note their pollen transfer occurs when the warm dry breezy conditions of late spring to early summer arrive after the rainy, humid conditions have waned.

**Hop Bushes enhance bird and insect diversity.** Hop Bushes' three dimensional twiggy and leafy frameworks are an open invitation for the wheel webbing spiders to weave their intricate webs to capture unsuspecting passing insect prey. These webs are diligently collected for binding the fibrous grass strands during nest building by insect and seed feeding birds such as Brown Thornbills, Flame, Scarlet and Dusky Robins, Welcome Swallows, Strong-Billed and Black Headed Honey Eaters, Grey Fantails, Eastern Spine Bills and Dusky Wood Swallow. Other large seed eaters such as Bronze winged Pigeon, Beautiful Firetail (Tasmania's only native Finch), Musk Lorikeet and Green and Eastern Rosella devour the nutritious winged seed clusters before they are either feasted on by seed weevils or glide to ground. Mid-storey bushes like Hop Bush and Native Box (*Bursaria spinosa*) planted into the park style urban landscapes and gardens provide an important role in helping to attract these seed and insect eating birds at the expense of the aggressive domineering nectar feeders such as New Holland Honey Eaters, Noisy Minas and Wattle Birds.

**Recommended Readings :** 1] Whiting, J., etal., 2004. Tasmania's Natural Flora. Tasmania's Natural Flora Committee; 2] Van Wyk, Ben-Erik, 2003. Gericke, N., People's Plants; A Guide to Useful Plants of Southern Africa. Briza Publications. 3] The Collection Newsletter Volume 6, Issue 1, 2004. *Dodonaea viscosa* Hop Bush [www.tcbmed.com/newsletters/volume6-Issue1](http://www.tcbmed.com/newsletters/volume6-Issue1) 4] Closs, J *Dodonaea* Study Group 1993 *Dodonaea* Australian Plants Journal 17/137 5] Latz Peter, Bushfire and Bush Tucker. Aboriginal Plant use in

**STOP PRESS !!! The Swampgum Walk—Boobyalla River—New Booklet - OUT NOW.**

Mike Douglas has produced an interesting booklet detailing the history, natural features and route details of the Swamp-gum Walk, an eight kilometre walk through some of the 96 hectares of Swamp Gum and Stringy-bark forest in the area he has so fervently fought to save from becoming dammed.

Mike describes the river as sometimes a “narrow, sluggish stream possessing an enigmatic charm” as it wanders through the “most extensive and best remaining examples of a landscape that was once more widespread”.

Two pages of the booklet are written under the heading “The Dam Threat ” and give the reader a thorough history of the recent attempt to construct a dam in the area.

Another feature of the booklet is an account of the visit to the area in 1831 by George Augustus Robinson. This is accompanied by extracts from Robinson’s diary, and a hand-drawn map of his journey.

Speaking of maps.... As club members would know, Mike’s maps are a great feature of the outings he leads for the club, as they are here in this booklet, with such careful attention to details such as reserve boundaries, quarries, mining races and, of course, the tracks.

I highly commend Mike on yet another interesting booklet, one which will add to our knowledge of the North East. It is available from the Pavilion, Bridport and from Scottsdale Art and Framing. Mike will also be happy to receive postal orders by phone 63 561 243. L.B.