Newsletter of the

Richmond Birdwing

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Natural Heritage Trust

Helping Communities Helping Australia

SEQ Catchments

Healthy land – healthy water

Our cover illustration of Pararistolochia praevenosa*, its flowers and seeds and food plant of the Richmond Birdwing butterfly, is from an original painting by Lois Hughes. Prints beautifully reproduced on quality water colour paper (295 x 210 cm), are available from Lois Hughes (ph. (07) 3206 6229) per print $20 print + postage.*

The ***RICHMOND BIRDWING RECOVERY NETWORK INC.*** since it was launched in 2005, has promoted conservation of the Richmond birdwing butterfly *Ornithoptera richmondia*, its food plants, *Pararistolochia* spp. and habitats. Membership of the *Network* is open to anyone interested in conserving the Richmond birdwing and other insects of conservation concern. The *RBRN* promotes liaison between interested community members, catchment groups and relevant local and state government authorities. The *RBRN* holds quarterly General Meetings and occasional Regional or Special Meetings. A Newsletter is published 3-4 times each year.

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RBRN acknowledges an award by Brisbane City Council's Environmental Grants Program towards production of the Newsletter. The purchase of a laptop, the projector and equipment used for the RBRN Newsletters and presentations, were gratefully supported by the Queensland Government's Gambling Community Benefit Fund.

PRESIDENT'S REPORT *Don Sands*

Spring and early summer rainfall has improved the breeding success of the Richmond birdwing and news is coming in to indicate local recovery and dispersal by adults that take advantage of warm, moist and cloudy weather as they move out from their breeding sites. Most exciting news was received from Katie and Tony Hiller who observed a female Richmond birdwing on 10 January 2008, depositing eggs on a planted, 9-year old birdwing vine near Oxley Creek at Rocklea, not far from Brisbane's markets! This news is especially re-assuring to those who remember birdwings occasionally turning up unaided and unexpectedly in the inner parts of Brisbane, before the dreaded drought began its impact on the birdwing and its vines, early in 2000. We should take Tony's advice to keep a close eye on the few "older" birdwing vines surviving in urban areas from those plantings made in the 1990s during CSIRO's Double Helix birdwing project, guided by Sue Scott.

This year increasing attention will be given to a project in partnership with the Queensland Environment Protection Agency, to study in-breeding depression in the Richmond birdwing. A grant and support received from an anonymous donor have given us the opportunity to erect a flight cage at Gold Creek and fit it up the irrigation with agreement of Moggill Creek Catchment Group (MCCG) and Brisbane City Council. Depending on the outcome of confinement studies on the butterflies at Gold Creek, the cage at Gold Creek and another at EPA's David Fleay Wildlife Park, West Burleigh, will be used for selection of birdwings of known genetic origin for their re-establishment in fragmented localities where the butterflies have become extinct. When the in-breeding studies are completed the cage at Gold Creek it will be handed over to MCCG as a plant propagation facility.

I thank the supporters and contributors to our *Richmond Birdwing Recovery Network* especially those supporting our RBRN Community workshop series now in demand from various groups in South East Queensland. Our Corridor Coordinators have done a marvellous job by identifying wild birdwing vine sites, identifying sites suitable for *Links* and *Stations* and helping distribute good quality birdwing vines to the community. Mapping by Hugh Krenske is now advanced and his efforts have made a "user-friendly" and accessible system to record our vine sites, plantings, corridors and birdwing sightings. Special thanks to *South-East Queensland Catchments* for their renewed support of RBRN activities in 2008. All these activities have developed community acceptance of the Richmond Birdwing as *the invertebrate emblem* for Subtropical Australia.

PLANT PROFILES

THE ARISTOLOCHIAS OF SUBTROPICAL EASTERN AUSTRALIA

Don Sands

Aristolochia spp.

Aristolochia meridionalis E.M. Ross

Distribution Maryborough Qld, west to the Main Divide, to Trial Bay, NSW
Abundance: common near Brisbane and on the Moreton Bay Islands, rare south of Gold Coast and becoming very rare in northern NSW where it may have disappeared from most of its original range from clearing and burning.
Habitats: Grows among grasses on well-drained or rocky soils, particularly shale in open or closed eucalypt woodlands, for example of Mount Coot-tha but also on sandstone, behind sand dunes and at the edge of heathlands. Flowers are slender, tube-like but expanded and right-angled apically and bulbous basally, pollinated by several species of midges. Seed capsules turn brown as they mature and break on the vine and the seeds are dispersed by wind. Growth is rapid during moist periods but otherwise almost dormant. Tolerant of some desiccation.
Herbivores. Vines are not long-lived and often completely decimated by larvae of the butterfly *Cressida cressida*. Other herbivores not known.
Cultivation and requirements. Seeds are easily germinated but small plants do not thrive unless in suitable soils in the ground.

Aristolochia pubera R. Br.

Distribution Cape York to Mount Larcom (id. W. MacDonald pers. Comm..) near Gladstone, Qld. This species probably extends its range well west of the Main Divide.
Abundance: Rare in south-eastern Queensland but common north of Rockhampton.
Habitats. Very similar to *A. meridionalis* but probably more drought-adapted as it occurs in much dryer habitats where it may be found commonly west of the Main Divide in northern Queensland and sometimes growing near rocky outcrops. Flowers, capsules and seeds similar to *A. meridionalis* and pollinated by several species of midges. This vine is a favoured food plant for larvae of the butterfly *Cressida Cressida*
Herbivores. A. pubera vines are not long-lived and are host to larvae of the butterfly *Cressida cressida*. Other herbivores not known.
Cultivation and requirements. Not known but probably similar to *A. meridionalis*.

Aristolochia elegans Mast. - Dutchman's Pipe

Distribution A South American invasive weed common from Cape York Qld to Port Macquarie, N.S.W (and probably further south).
Abundance: Very common, especially in riparian situations.
Habitat: A vigorous vine that grows on all soil types. It often smothers and displaces native rainforest vines, or invades riparian vegetation in localities where *P. praevenosa* grows or once occurred. It also invades vegetation on dry creek beds and forestry plantations where it is a serious weed and continues to appear in gardens where it is cultivated for its showy flowers. It is very toxic to sheep, cattle and other animals. Flowers are pollinated by several midges. The seed capsules mature and break on the vine and the seeds are dispersed by wind.
Herbivores.The Richmond birdwing will oviposit on this vine but the leaves are toxic to the larvae when they attempt to feed. The leaves are also toxic to the larvae of the "greasy" butterfly, *Cressida cressida* but new information indicates that sometimes larvae complete development by feeding on the flowers, or senescing leaves near the ground, which do not appear to be toxic (Sands unpublished). Curiously the adults then produced are larger in wingspan that the normal adults from larvae feeding on the native vines.
Cultivation This introduced weed should not be deliberately cultivated.

Pararistolochia spp.

The food plants of *O. richmondia*, *Pararistolochia praevenosa* and *P. laheyana,* were originally considered to belong to the genus *Aristolochia.* Parsons (1996) raised *P. laheyana* to specific rank (previously known as *Aristolochia deltantha* var *laheyana*) and transferred both species to the genus *Pararistolochia*. These two species of vines, *Pararistolochia praevenosa* and *P. laheyana*, are natural food plants for the larvae of the birdwing. Breeding colonies of *O. richmondia* mainly persist in rainforest wherever the food plant vines occur at densities of *ca* 30 or more vines per locality provided there are corridors to link them. *Pararistolochia deltantha* occurs in northern Queensland and possibly in Papua New Guinea. *Aristolochia* spp. have seeds that are dispersed by wind when the capsules open on the vine, whereas *Pararistolochia* spp. have fruit that fall to the ground unopened. They are dispersed by animals or birds

Pararistolochia laheyana (F. M. Bailey) Michael J. Parsons - Mountain Aristolochia

Distribution. Pararistolochia laheyana occurs only on the Queensland-NSW border Ranges and its ridge-tops, in Queensland at altitudes above

600 (usually 700-1000 m) from Upper Tallebudgera Creek, Springbrook, Binna Burra, Lamington Plateau, Roberts Plateau, O'Reilly's, Border Track, above Canungra, Mount Wagawn, Mount Merino and eastern Macpherson Range. One unconfirmed record from near Toowoomba. The western limit is not recorded. In New South Wales it occurs on the summit of Mount Warning, on the Western Rim, Wiangarie State Forest, Whian Whian, Nightcap, Richmond Ranges and Mount Nardi.
Abundance. Very common vine on the volcanic rims of the two States.
Habitat. *P. laheyana* is often found entwined among shaded low growing shrubs but it may ascend 5 m into the understorey. The leaves and stems are smaller than those of *P. praevenosa*, smooth above while the old leaves are much softer in texture.
Flowers are bi-sexual and have been observed from February to October and are about 20 - 30 mm long with a swollen base. They differ in colour between localities; the sepals are usually broad, internally pale pink, and speckled with maroon through to bright yellow, with maroon venation externally.

Mature seed pods are light green, narrower and more elongate than *P. praevenosa* and range from about 30 – 50 mm in length. They are smooth, more elongate and narrower than those of *P. praevenosa*.
This vine occurs naturally on volcanic soils, mainly basaltic. Unlike *P. praevenosa*, this vine prefers montane ridges and slopes but is uncommon near streams or water courses. It is often found entwined in low growing shrubs, where it sometimes ascends 5 m into the understorey. Occasionally its slender stems arise from basal broad (5 mm) stems but usually the slender stems arise directly from ground level.

Herbivores. *P. laheyana* is occasionally host to the Richmond birdwing when winter temperatures and desiccation are not severe. Typically the vine supports large numbers of birdwings for 2-3 years after mild winters but they are killed during clod, dry snaps. *Cressida cressida* will oviposit and complete development on the vine at its lower extremes of altitude (ca 600m). The seed capsules mature and capsules fall intact to the ground where seeds are dispersed by the Australian brush turkey (*Alectura lathami*). Seeds are distributed mechanically by burying and do not pass through the gut

Habitat: Now mostly a riparian vine, forming localized stands or old growth upright growth from root suckers, in subtropical lowland and low mountain rainforests with basaltic or other basic volcanic soils. Less commonly it occurs on shale and sandstone soils and rarely on old sand dune rainforests with a high water table. Grows naturally in heavy shade but also thrives in open conditions when it has access to sufficient ground moisture and is not exposed to fire. Flowers are pollinated by one species

Pararistolochia praevenosa (F. Muell.) Michael J. Parsons - Birdwing butterfly vine

Distribution Until 1932, probably occurred from Maryborough and Gympie Qld to near Grafton, NSW (based on the original distribution of the birdwing herbivore). Currently (2008) known from Kin Kin, Qld to Wardell, NSW. This vine is recorded from the Atherton Tablelands, northern Queensland and is not known to occur otherwise north of Maryborough. In southeastern Queensland it originally occurred on the coast from just north of Mary River Heads (<1959) patchily to the Qld/New South Wales border. The vine currently naturally occurs in rainforests at Kin Kin Creek, and from near Eumundi to Beerwah. On the coast only two fragments of habitats occur in rainforest, one near Coolum, but it has gone from Noosa Heads. It appears further south on the coast at Burleigh Heads. Further inland it occurs in more than 120 fragmented patches on the Blackall and Connondale Ranges and at Mount Mellum. On the D'Aguilar Ranges there are two localities supporting the vines and south of Brisbane it occurs in small densities at Nerang, Mount Tamborine, Burleigh Heads, Canungra, the Tallebudgera Valley and foothills of the Border Ranges. The original western limit of the vine is not known but it is thought to have occurred as far west as the eastern escarpment of the Main Divide near Toowoomba. In northern NSW *P. praevenosa* occurs on the coast from the Tweed River to Broken and Brunswick Heads, and Grafton on the lower Clarence River. It is also recorded to the west from Whian Whian, Alstonville, the base of Mount Warning and Ballina. The present southern limit is near Wardell and its western limit is Cherry Tree State Forest near Melanganee, near the upper Clarence River.

Habitat Large vines branch close to ground level, producing somewhat flattened, stems bearing widely-spaced nodes with alternate leaves. On older plants, stems sometimes emerge horizontally and layer, developing clumps of vines which climb vertically. Mature stems, oval in cross section, may be 1–4 cm in width and fuse when in contact with other ascending stems. The bark has a dark brown, distinctive reticulated pattern easily recognisable under the rainforest canopy. Vines produce growth throughout the year, particularly after rain during autumn and winter. They may ascend 15 m into the canopy but usually only reach 7 m. In common with several other species of *Pararistolochia*, the alternate mature, dark green leaves of *P. praevenosa* are very tough. Young, paler green leaves have fine short hairs, becoming much firmer and smoother about 2 months after emergence. Mature leaves vary in texture and size according to shade, soil, nutrients and moisture. Leaves are usually 12-18

cm long and 3-7 cm wide, but occasionally reach 25 cm or more in length.

Flowers and pollination. Flowering occurs mostly September to December. The length of each flower is about 2.5 cm, tubular and purple veined externally. The sepals bright yellow internally. Flowers are bi-sexual and do not secrete nectar but are pollinated by an undescribed species of midge (*Forcipomyia* spp.), Midges are probably attracted to flowers by kairomones as only males have been found in flowers. They probably breed in wet leaf litter or moist sand near watercourses. Individual plants vary greatly in the number of flowers produced and seed capsules that develop. Under the rainforest canopy few flowers become pollinated and capsules tend to develop more frequently when plants are in exposed positions.

Seed set and seed dispersal. After pollination in spring, the young green seed capsules expand over summer before turning bright yellow, become soft when ripe in autumn and fall from the vine, often fracturing on impact. They range from about 25 – 60 mm in length with longitudinal ribs and contain about 20-60 flattened seeds which remain viable after ripening for only a few weeks unless kept moist. The Australian brush turkey (*Alectura lathami*) is the principal agent for dispersing the seeds. Brush turkeys break open the capsules with their claws to feed on the pulp of the fruit and bury the seeds by scratching. Seeds often germinate in batches, resulting in naturally-occurring clumps of seedlings. Silvereyes have been seen to feed on the fruit (A. Powter) but their role in seed dispersal has not been determined. Seeds are only dispersed short distances by the turkeys and small clumps of seedlings are very rarely found more than 30 m from the mature parent vine

Soils and associated plant communities. *P. praevenosa* is a locally-distributed vine mostly occurring in patches in lowland subtropical rainforest (<600 m), near river banks and streams but also on basaltic slopes and very rarely, nutrient-rich sandunes. It prefers permanently moist, well-drained volcanic soils or basaltic slopes, creek banks with alluvial volcanic floaters and occasionally, moist, old sand dune loams overlying volcanic soils. Associated vines include *Flagelleria indica*, *Callimus muelleri, Carronia multisepalea* and *Melodorum leichhardtii*. They often inter-twine to form dense, tangled, upright groups of stems ascending the canopy.

Vines in cultivation are very adaptable to a range of soils and conditions, particularly alluvial and when fertilised, but do not usually grow rapidly or mature until at least 3 years after planting. Old vines are easily recognised beneath the rainforest canopy by their reticulated stems and seedlings germinate in more exposed areas.

STUDIES ON IN-BREEDING DEPRESSION IN THE RICHMOND BIRDWING : DEVELOPING A FEASABILITY STUDY

Don Sands

Developing a recovery plan for the Richmond birdwing (*O. richmondia)* must promote breeding in the wild, enhance survival of instars and avoid sources of natural mortality. On the local scale for example, young larvae or eggs can be moved when susceptible to ant predation to plants where the predators are absent. However, the solutions to in-breeding depression, a problem with conservation ramifications first studied by Dr Bert Orr (1994), are not so easily resolved. However, they might be addressed by moving birdwing stocks from one area to another, to increase genetic variability and to prevent abnormal debilitation or mortality Resulting from local "bottle-necking" (often resulting from sibling mating) when local adult densities become low could then be avoided. In-breeding is also exacerbated by the effects of drought on the butterfly stages and its lowland food plant.

A feasibility inbreeding depression study on the Richmond birdwing is being developed by RBRN, in partnership with the Queensland Environment Protection Agency, to rear for release, genetically vigorous individuals with appropriate inherited variability in order to maximise survival in areas where they have become extinct. Local extinctions have occurred where breeding corridors have been severed and disrupted by human activities. Selection of genetic stock for release will be based on mating males and females from widely-separated populations. An important question to answer is "what distance between origins of parents can be considered adequate to ensure that genetic variation is likely to reduce depression in their offspring?" This is a difficult question to answer and we can only base the distance as "somewhere beyond the maximum distance from the nearest breeding site that a female has been observed ". In our case we know female birdwings have been observed about 30 km from the nearest breeding site and we have therefore nominated 40 km as an appropriate minimum distance for selecting parents for mating and releases of offspring.

Without the studies and conservation concerns of Orr (1994) revealing in-breeding depression occurred in a captive reared colony of the Richmond birdwing, we would have no understanding of how to identify the problem as it appears in the wild populations, especially in localities where food plant vies are adequate in number and quality. As we make progress with this collaborative study results will be published in this Newsletter series.

Orr, A.G. 1994, Inbreeding depression in Australian butterflies: Some implications for conservation. *Memoirs of Queensland Museum*.36: 179-184

THE CULTIVATION OF *PARARISTOLOCHIA LAHEYANA*

Hugh Krenske

With the very successful propagation program of the rare vine *Pararistolochia praevenosa* (Richmond Birdwing Vine), one may wonder why we have taken on the propagation of *P. laheyana*. While *P. praevenosa* is the dominant lowland host plant for the larvae of the Richmond Birdwing Butterfly, at altitudes above 600m, the female butterfly lays its eggs and the larvae feed on, the leaves of *P. laheyana*.

Toowoomba has not been graced by the presence of the Richmond Birdwing Butterfly for over 20 years and in previous years the Toowoomba escarpment of the Main Divide was considered by some as the western most limit of the butterfly's range. The only recorded wild host plants growing on the eastern escarpment of the Main Range near Toowoomba was of *P. laheyana* in the late 1980s and early 1990s. Recent attempts to locate those vines in their mapped quadrant have failed and it probable that 15 – 20 years of drought have taken their toll on any remaining fragments.

With the publicity given to the plight of the Richmond Birdwing Butterfly in the 1990s, a number of Toowoomba gardeners took up the challenge and planted one or more *P. praevenosa* vines. Some have struggled while others have thrived. In many of those years, given the on-going drought conditions in the area, none would have been able to support even one caterpillar with fresh new leaf growth, let alone a sustainable population of butterflies.

Despite the success of the *P. praevenosa* plantings, I think that it is essential that we also plant *P. laheyana* as it still the only wild *Pararistolochia* documented for the area.

Our first *Pararistolochia laheyana* was propagated as a cutting from a segment of vine provided by Don Sands at a talk on the Richmond Birdwing in Toowoomba in March 2006. The parent vine from Brisbane has since died. In 2006 we obtained further vegetative material from Springbrook (under permit) and one of these produced a very strong plant with a leaf appearance similar to a praevenosa. In 2007 we obtained more cuttings and after 3 visits to Springbrook, we obtained 4 very small seed capsules.

SUNSHINE COAST NEWS

Ray & Pam Seddon

Much has been accomplished by Volunteers, Property Owners, Land care Groups, & the Community. since the last RBRN Newsletter in August 2007.

A special thanks to all our Local Council Members who have given great support to Projects planned for the future including plans for Stations and Links, and to grow *Pararistolochia praevenosa* in Reserves & Parks throughout the Shire.

The following need to be acknowledged:
(1) Propagation of Vines by Volunteers at the Council Nursery facility Caloundra Vines for distribution at "Free Tree Days" to establish "Links"" on Land or Wildlife properties.

(2) A "Notice of Motion" put forward by Cr. Anna Grosskreutz that the Richmond Birdwing Butterfly be used as (or be part of) the new Emblem for the Sunshine Coast Regional Council. This has overwhelming support from the residents of the Sunshine Coast.

(3) Thanks for the offers of financial support in the form of Grants to finalize stage 3 at Mary Caincross Scenic Reserve. Signage, Location Map, Brochures, and Website

Thanks for support from Barung Landcare who have co-coordinated two RBRN Field Days which have been well supported. Thanks also to-Fuschia.More, Nick Clancy and Alan Wynn " Land for Wildlife' Caloundra Shire

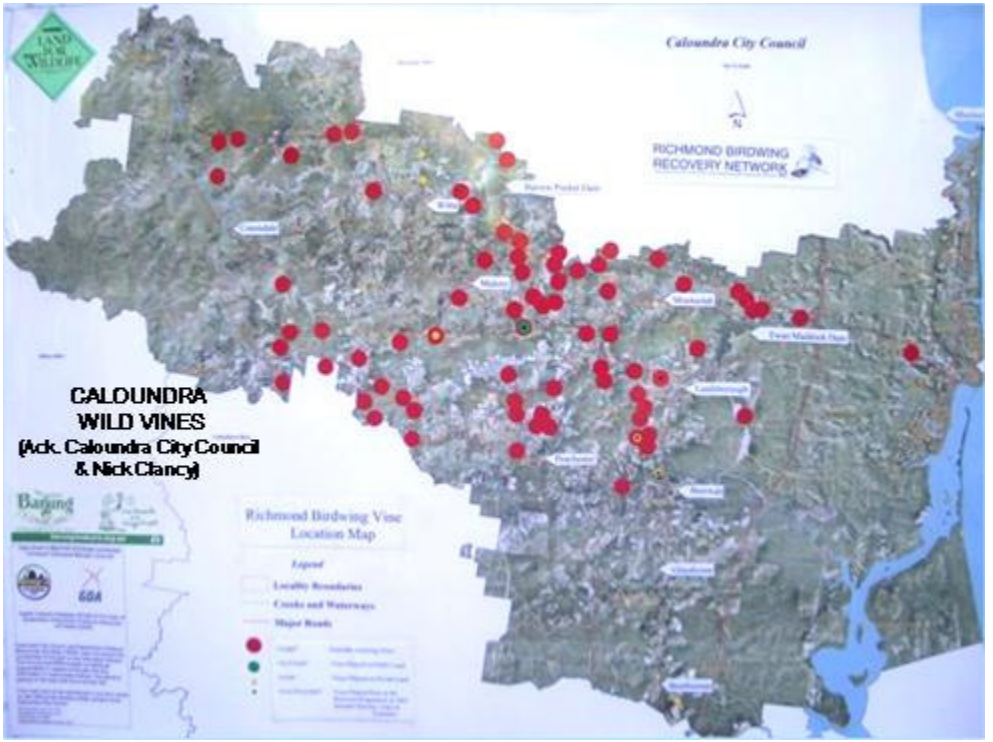
LAUNCH OF THE RICHMOND BIRDWING BUTTERFLY WALK AND GARDEN AT MARY CAIRNCROSS SCENIC RESERVE.

Ray & Pam Seddon

The Official Opening of *The Richmond Birdwing Butterfly Walk & Garden* at Mary Caincross Scenic Reserve, followed the RBRN General Meeting 27th October 2007. The Walk & Garden was officially opened by John Birbeck – Environmental Officer, Caloundra Shire Council, Councillors Dick Newman and Andrew Champion, attended by members of RBRN and visitors. John Birbeck unveiled a Plaque to reveal the Walk & Garden, dedicated to Dr. Don Sands.

John Birbeck thanked Don for his dedication to the Conservation of the Birdwing Butterfly, noting the Project as a Flagship in the field of Science Education and Conservation of other threatened Species.


Dr Peter Mackey,
Chairing the RBRN
Workshop –
Noosa & Beyond


Caloundra City Council
RICHMOND BIRDWING
RECOVERY NETWORK
CALOUNDRA
WILD VINES
(Ack. Caloundra City Council
& Nick Clancy)
Richmond Birdwing Vine
Location Map


Map 1
Wild
Planted
3
2
1
5
1
Rainbow Beach
Kilkivan
Curra
Toolara State Forest
Goomeri
Gympie
Noosa Heads
Wondai
Amamoor
Yandina
Coolabunia
Mt Stanley State Forest 1
Nanango
Bokarina
Caloundra
Blackbutt
A3
85
17
Caboolture
Bongaree
Crows Nest
Esk
Rothwell
Redcliffe
Strathpine
A3
Gatton
A2
Ipswich
5
Yeerongpilly
Redland Bay
Laidley
Rosewood
Park Ridge South
Beenleigh
15
Jimboomba
Clifton
Arundel
Boonah
90
Allora
Beaudesert
Main Beach
Tweed Heads
15
13
42
Warwick
Killarney
Border Ranges National Park
Murwillumbah
Kingscliff
Bogangar
Braeside
Woodenbong
Uki
Map data ©2008


Map 2
RB Butterfly
Male
Female
Pupa
Larva
Egg
Range 1900
A1
Tin Can Bay
Rainbow Beach
Kilkivan
Goomeri
Curra
Toolara State Forest
Gympie
Noosa Heads
Amamoor
Coolabunia
Mt Stanley State Forest 1
Yandina
Mt Coolum
Nambour
Maroochydore
Maleny
Bokarina
Caloundra
Landsborough
A3
85
1
17
Caboolture
Bongaree
Crows Nest
Esk
Rothwell
Redcliffe
Strathpine
Brisbane
Toowoomba
Gatton
A2
Ipswich
5
Yeerongpilly
Redland Bay
Laidley
Rosewood
Park Ridge South
Beenleigh
15
Jimboomba
Eagle Heights
Arundel
Clifton
Boonah
90
Nerang
Main Beach
Allora
Beaudesert
Broadbeach
Tallebudgera
13
Warwick
Killarney
Border Ranges National Park
Murwillumbah
Woodenbong
Tyalgum
Map data ©20

Hugh Krenske and Pam Seddon working on the RBRN data base

FEBRUARY TOOWOOMBA GENERAL MEETING & FORUM:

RESTORING FRAGMENTED HABITATS – GENETIC ISSUES FOR BUTTERFLIES AND THEIR FOOD PLANTS

Oh, by the way, birdwings this year have been exceptionally large, great to see.

Happy New Year to all and best wishes for many more great things for all of us in our efforts to save the Richmond birdwing butterfly.

COMMUNITY TALK AT BEERWAH PUBLIC LIBRARY (7 November 2007)

Greg Ivey
Mary Cairncross Scenic Reserve

Ray Seddon and I (Greg Ivey Council Education Officer) arranged to present information on the recovery of the Richmond birdwing butterfly to Beerwah residents at the local Library in November 2007. Library staff organised publicity and made display boards available for Ray and Greg to attract interest from Library visitors. An audience of about 40 residents including Councillors Dick Newman and Anna Grosskreutz sat in the Library Meeting room to hear the talks. Greg Ivey introduced the scope of the two talks and welcomed questions. Greg then used questions to the audience to emphasise the importance and special features of the Mary Cairncross Scenic Reserve at Maleny. He invited the audience to help protect the Reserve by becoming a Volunteer in the Education Centre. He recommended that the audience visit the new website: www.mary-cairncross.com.au

Ray Seddon then spoke about the Recovery Project for the Richmond Birdwing Butterfly in the southern Sunshine Coast district. Ray used a variety of visual material such as photos, maps, display boards and plants to show and illustrate his topics. The audience asked many questions which Ray answered fully using the exhibits. Ray generated much enthusiasm for the Recovery Project.

Over afternoon tea, Ray and Pam were busy fielding questions and requests from those present. Residents were delighted with the offer of a Butterfly plant under Ray's conditions. The two Councillors were very interested and impressed and promised their active support for the Sunshine Coast Project

.RECENT SURVEYS IN THE MARY RIVER CATCHMENT

Eva Ford, Catchment Officer
Mary River Catchment Coordinating Committee

What could be more thrilling than finding the Mother of them all?! True novices, Vanessa Bugg and I, along with our wholesomely experienced mentor, Don Sands, were lead by knowledgeable local and grower of indigenous plants, Graeme White, to view and record a stand of

Pararistolochia praevenosa in the Walli Creek area in early November of this year. What Graeme showed us was a proverbial cathedral of trailing vines and twisted knots covering an area of around ½ hectare. Even Don was impressed and estimated its age at between 300-400 years old. It wasn't the only one either. Very nearby was another, equally awesome, stand of vines. What a treat for Vanessa and me, mere babes on our first mission!

Don showed us how to 'get your eye in'; look for the low leaves at body height, the tessellated bark; the little 'cells' of raised bark like elongated brick-work, the parental knots of vines down low, the skeletonised leaves on the ground, the feed marks on the leaves if you are lucky. Unfortunately these vines showed little evidence of recent feeding by hungry caterpillars – why? Locals along the creek have been seeing few butterflies in the past couple of years compared to 'heaps' 5 or so years ago. Could it be the nearby infestations of Dutchman's pipe? Could it be the drought?

So we moved on to find a lovely small area of vines along Kilcoy Creek near Conondale. The landowners were ecstatic and vowed to protect and enhance through fencing and planting in the hope of turning the creek-side area into a 'Butterfly garden'. Don and I later confirmed some more vines along upper Belli Creek, which one of our rehabilitation contractors had found while weeding in the area. This person and her partner had only very recently learnt what the vine looks like having received 30 from us to plant along Pinbarren Creek near Cooran. A little bit of knowledge goes a long way!

Walli Creek is an unusual system for that part of the world in that it is dominated by *Melaleuca bractiata* and is very dry. It is also at this point dominated by Madeira vine which is being harnessed by the powerful force of the Barung contracting arm as I write this! Nearby Obi Obi Creek possesses the typical RE 12.3.1 (Gallery rainforest on alluvials plains and channels) which supports *Waterhousea floribunda* and many other rainforest species common to the north and east of the Mary catchment. It also has its own Madeira problems. But - back to Walli. Adjacent to the creek is Walli Mountain and other hills which make this valley very picturesque. Some of the hills are composed of red volcanic soil and patches of fantastic rainforest remain almost untouched, except for the past antics of tree-fellers. Another search on another property with vast areas of this vegetation almost instantly revealed its prize to us. To say the least our collective heads swelled with achievement as we were able to find and identify, unaided, our very first vines! For a pair of botanical no-hopers that was a pretty fine feat and a credit to Don's teaching skills!

News from Lower Sunshine Coast and Beyond.

Oh!! What Rain.

All that rain has produced a transformation on the Richmond Birdwing Vines, something not experienced since the Richmond Birdwing Recovery Network inc was formed.
Vines that have sat for years, showing little or no growth, have now burst forth into a profusion of tangled leaders and leaves.
At the beginning of the Flowering (Spring 2007) Vines produced an abundance of flowers which I have never witnessed before, but a very low percentage were pollinated resulting in many spent flowers dropping
Monitored Vines for example at Mt Mellum last year produced 6.5 kg of seed pods whereas this year only 2.25kg were harvested.
In some other regions on the Sunshine Coast large No's have been reported. Nature at work.
All Nurseries do have seeds to ensure a constant supply for the future.

Butterflies on the Move.

It is pleasing to hear the joy and enthusiasm when Members of the Community report the sightings of Eggs, Larvae, Pupa and adult Birdwings in areas which have had no sightings for years or not at all.
For instance Glasshouse Mts., the most Southern Boundary on the Lower Sunshine Coast reported 1 Male & 1 Female and to the extreme North at Kin Kin & even Bauple sightings were reported. Perhaps one of the plausible reasons for this is better education, and publicity through Landcare Groups, RBRN Workshops and Presentations by Co-ordinators generating a positive effect on the Community at large and ensuring a great result for the Recovery Programme.
This also enables us to keep very good records on the RBRN National Data Base

Richmond Birdwing Butterfly as proposed Emblem for Sunshine Coast Regional Council

The documentation has been passed onto the C.E.O for SCRC so is still in the pipeline for consideration.
Will keep everyone informed on the progress.

RICHMOND BIRDWING BUTTERFLY VINES

ProPlants Morayfield is a local wholesale nursery that is a registered grower of Pararistolochia praevenosa (Richmond Birdwing Butterfly Vine).

At present, we have 700 advanced vines in 200mm pots ($6) ready for planting and another 800 vines will be available in early spring. Further plantings this year will ensure a reliable supply of the vines for Birdwing Recovery Groups and Councils in the region over the coming planting seasons.

If you would like to order stock or arrange to inspect stock, please do not hesitate to contact us. We look forward to being involved in the movement to re-establish this iconic butterfly in our region.

Gary & Maria Einam

Proprietors ProPlants Morayfield

ADVANCED BIRDWING VINES AVAILABLE NOW

ProPlants
Wholesale Nursery

has 700 *Pararistolochia praevenosa* vines in 200mm pots ready now for planting with runners up the stake (1 metre high) at $6 each.

Phone or email orders to Gary at
einam@westnet.com.au
Mobile 0429342259

LAND FOR WILDLIFE — HELPS PROTECT BIRDWING HABITATS

If you haven't already done so, have your property assessed for inclusion in the Land for Wildlife (LfW) Program. We are looking for bushlands, wetlands and creeklines more than 0.5 ha, containing wildlife habitats. L f W provides a sign to recognise your contribution, regular newsletters, advice and assistance to conserve the wildlife habitats occurring on your property. You can even upgrade your property with a Voluntary Conservation Covenant (VCC) to protect the wildlife habitats on your land title. VCC lands attract more financial assistance because of the increased landowner commitment.
For more details contact RBRN Councillor Greg Siepen at greg.siepen@brisbane.qld.gov.au

THE RBRN ON-LINE DATA BASE

Hugh Krenske

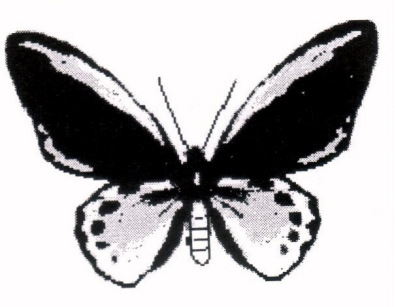
New f**eatures** for **visitors and registered users** have been added to the RBRN on-line database at www.210west.org.au/rbrn .

Visitors can click on the "mapping/report" link and display maps for all birdwing vines with latitude and longitude references, or maps for selected local government areas or butterfly sightings for the last three years.

Registered users can logon using your username and password and select the edit option. Set some criteria for your selection and view the result. You will notice that a red lettered map button will be displayed beside any displayed record that has latitude and longitude coordinates. Click on this icon and a Google Earth map will be displayed showing the location of the record.

You will also notice that a yellow lettered map button will be displayed at the top of the list. click on this icon and a map will be displayed showing the location of any items in the list that have latitude and longitude. Items without these coordinates will not be displayed.

Note that you do NOT need to have Google Earth installed on your computer for this feature to work.



Gratefully acknowledged for support of RBRN activities are: Brisbane City Council, Toowoomba City Council, Noosa Shire Council, Maroochy Shire Council and Caloundra City Council. South East Queensland Catchments, Queensland Landcare, Volunteer Small Equipment Grants scheme, Voluntary Environment and Heritage Organisations Programs and anonymous donors.

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* Corridor Coordinators are members who represent the RBRN and its members at local Richmond birdwing events and act as *Network* contacts for the community in their areas. They are not members of the Council but may be elected at any time of the year. Coordinators are encouraged to provide each year a report on habitat fragmentation and rehabilitation of corridors, as well as birdwing vines planted at *Stations* (public land) and *Links* (private properties) in their areas. Wherever possible they may assist members with vine identifications, and locating and mapping of wild birdwing vines for the RBRN *Birdwing Data Base*.

NOTICE OF GENERAL MEETING

The next General Meeting of the *Richmond Birdwing Recovery Network* will be held on:

SATURDAY 23 FEBRUARY 2008
10 am—2.00 pm

AT THE SCOUT HALL, HELLER ST., PICNIC POINT, TOOWOOMBA

The main business will be a Forum with invited speakers leading discussions on:

RESTORING FRAGMENTED HABITATS— GENETIC ISSUES FOR BUTTERFLIES AND THEIR FOOD PLANTS

(genotypes & phenotypic plasticity, meaning of "local provenance", outbreeding and inbreeding depression)

VISITORS ARE WELCOME

RSVP (for catering): RBRN Vice President, Hugh Krenske, Mob. 0418 748282, phone (07) 4635 1758. email hkrenske@tellsystems.com.au.

RBRN acknowledges Brisbane City Council for contributing to the costs of producing this Newsletter. Gratefully acknowledged for support of RBRN activities are: Toowoomba City Council, Noosa Shire Council, Maroochy Shire Council and Caloundra City Council. South East Queensland Catchments, Queensland Landcare, Volunteer Small Equipment Grants scheme, Voluntary Environment and Heritage Organisations Programs and anonymous donors.