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# Annual Report 2019

## Atlas of Life in the Coastal Wilderness

Presented at the Annual General Meeting, 12 December 2019

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one part of the Atlas of Life region (photo courtesy of Richard Green - richardgreen.net.au)



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## From the Chair

“This has been a great year” ... that’s typically the opening line in an organisation’s Annual Report. But we are in a climate emergency. An extinction crisis. I simply can’t call it a great year.

It has been an *important* year. And next year will be important too. What we do now, as individuals, communities and nations, will determine the nature of the planet ... quite literally.

Everyone involved with ALCW values the natural environment. Nature fascinates us and rewards us as we seek to better understand the biodiversity of the region. And for this reason 2019 has been a traumatic year for all of us. None can help but see the effects of a changing climate on our natural environment. And we are all too aware that there is more change to come.

So for me, ALCW will become increasingly important as a way to stay positive. Every sighting we record – every discovery we make – every time an animal or plant causes us wonder – will be an uplifting moment. We share that wonder with one another. I am confident that ALCW will continue to have a positive effect on us as individuals. Even as our nature sightings contribute to scientific knowledge, such efforts also contribute to our collective wellbeing.

Annual reports provide an opportunity to document an organisation’s activities and achievements over the past 12 months. Descriptive statistics are prepared and presented, all-important data for good decision making and planning. Such reports empower members by providing insights into the organisation they belong to. Importantly, they also help external agencies understand the nature and breadth of the enterprise.

I trust that this ALCW Annual Report can achieve all of this. But just as importantly, I hope that the document highlights the real strength of this group – the people involved.

### **A very special acknowledgement and thank you**

Since ALCW began in 2011 Libby Hepburn has been our Chair. Libby’s vision and drive shaped the Atlas and built the group. Through her own efforts and the commitment she has inspired from others, ALCW has a rock solid foundation and an excellent reputation. As incoming Chair, it is my privilege and great pleasure to thank her on behalf of all of us.

*Kerri-Lee Harris, ALCW Chair*

*December, 2019*

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# 1. THE ORGANISATION

## Background

The Atlas of Life in the Coastal Wilderness (ALCW) was formed in 2011. A group of local people with the aim of documenting and monitoring biodiversity across the region. They sought to create a collaborative project involving researchers, natural resource managers and the wider community.

This was always intended to be an ongoing, long-term project. The group is entirely volunteer based and non-commercial. ALCW was incorporated in July 2013 and entered onto the Register of Environmental Organisations in Oct 2017. The objectives, constitution and related documents are publicly available on the website. ([www.atlasoflife.org.au/about-1](http://www.atlasoflife.org.au/about-1)).

## Membership

As at 9th December 2019, our list of members is 827. People join in various ways: by registering as users on the *NatureMapr* database; by subscribing on the Atlas of Life website; or by joining Atlas Naturalists. The latter has been a significant avenue for attracting new members this year.

## 2019 Committee

Liz Allen; Maggie Clowes; Kerri-Lee Harris; Libby Hepburn; David (Macca) McCreery; Andrew Morrison; Elizabeth Walton; Paul Whittington; Paul Whittock

**Chair:** Libby Hepburn (to May); David (Macca) McCreery (May-Oct); Andrew Morrison (May-Oct); Kerri-Lee Harris (from Oct)

**Secretary:** Maggie Clowes

**Treasurer:** Sharon Heffernan (to May; Patricia Daly (acting May-Oct); Jennifer Wilcox (from Oct)

**NatureMapr administrator:** Patricia Daly

**Public Officer:** Mandi Stevenson

## Affiliations

ALCW is a member of the *Sapphire Coast Regional Science Hub and Sustainability Education Network*. As users of the *NatureMapr* platform, ALCW is also part of the growing *NatureMapr Network*. After eight years of leading ALCW, Libby Hepburn stepped down from her position as Chair in May 2019 but continues to be very involved in the development of the *NatureMapr Network*.

## 2. NATUREMAPR

### The database

#### Background

*NatureMapr* has been the platform used for ALCW sightings since mid 2016. Ours was the second project to use the system, after Canberra Nature Map. The number of projects is growing, with various other region-based groups both nearby and in other parts of Australia. Each group is distinct in its history and particular mission but there is considerable sharing of expertise across the *NatureMapr Network*.

There are currently 340k sightings records on the ALCW database, involving more than 6,000 species. In late 2018 thousands of additional sightings were added through a bulk import of historical records. These came from a range of trusted sources and date back decades.

**Table 1: ALCW NatureMapr records**

	Number of species*	number of sightings^
<b>TOTAL</b> (at 3/12/19)	6,146	340,466
plants	2,384	222,304^
fungi plus	512	2,482
birds	325	98,577^
mammals	85	5,118
reptiles & frogs	62	1,422
fish	249	809
insects	1,570	4,958
terrestrial invertebrates	164	614
marine invertebrates	777	4,055
freshwater invertebrates	18	49

\*some classifications are above species level (i.e. genus or family). This is particularly true for insects, as reliable species level identification is often not possible from photographic data alone.

^thousands of older sightings for our region were bulk imported in Dec 2018. They span many decades. These are from trusted sources such as NSW BioNet Atlas and CSIRO/Atlas of Living Australia. Many do not have photos.

#### Moderators

Moderators play a vital role in the project. They provide feedback to contributors and lend their expertise in making species identifications. Many are also significant contributors, adding thousands of sightings each year.

We currently have 31 *NatureMapr* users with moderator status, including several new moderators signed on in 2019. Individuals vary in their degree of specialisation. Some are experts for a very specific group. Others are more generalist, able to identify a broad range of taxa while

drawing on help from specialists when necessary. Some moderators live locally, others further afield.

We will continue to recruit and mentor more people as moderators. In particular, we are seeking people to assist in the identification of fish and other marine organisms. People with highly specialised knowledge of individual taxa are also very welcome.

### **NatureMapr users**

Hundreds of people have registered on ALCW *NatureMapr* since its launch and numbers continue to grow. The database is freely and publicly accessible. Species lists and sightings can be viewed without registering and logging on. However it is necessary to register as a user in order to access detailed distribution data and to add sightings.

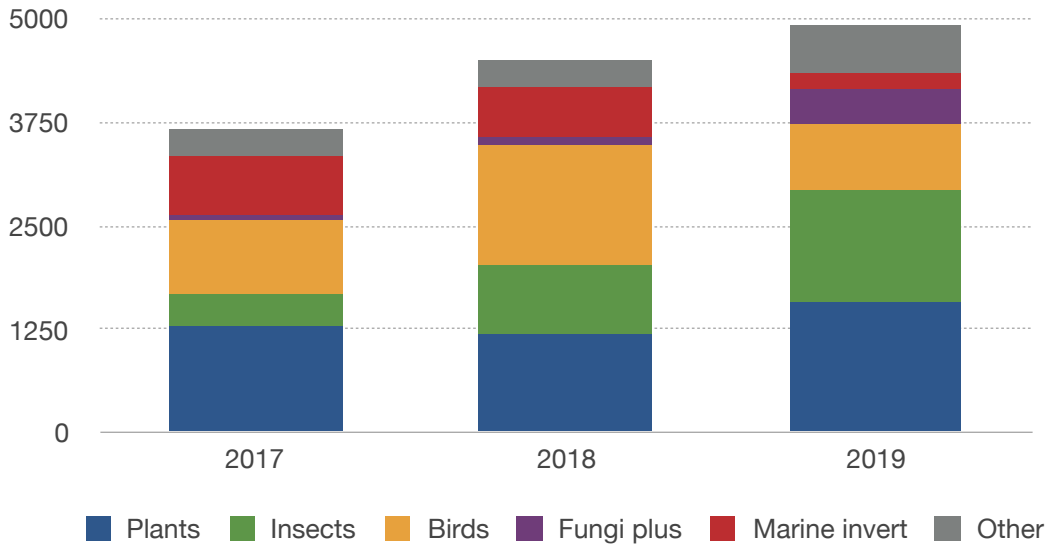
There are currently 650 registered users. Nearly a third of users (n=194) have actively contributed sightings in the past 3 years (see also Fig.3) and 56 of these people have each added more than 10 sightings. We also know that many people access the database without adding sightings. They are using the field guides to identify species or investigate species distribution.

# Statistics

## Sightings

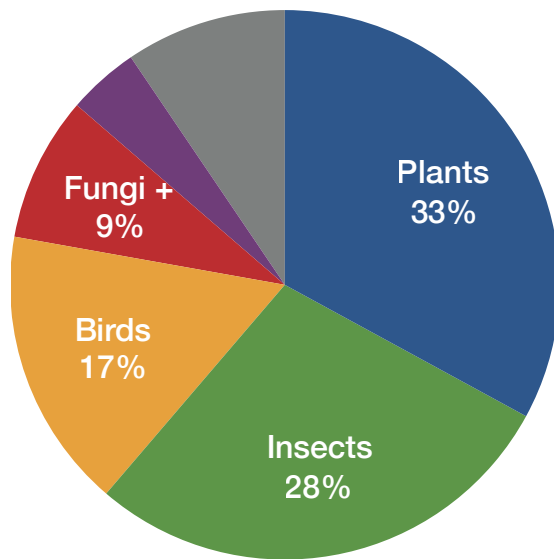
ALCW *NatureMapr* sightings continue to build. To date for 2019, nearly 5000 sightings\* have been added to the database (Fig.1).

Figure 1: number of sightings\* each year



Plants and insects make up more than 60 per cent of the sightings for 2019 (Fig.2).

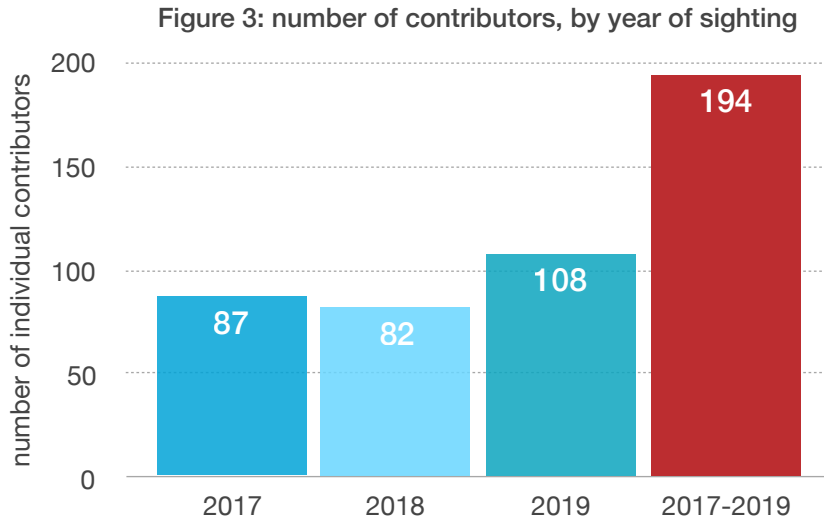
Figure 2: proportions of 2019 sightings\*, by category (total n=4,938)



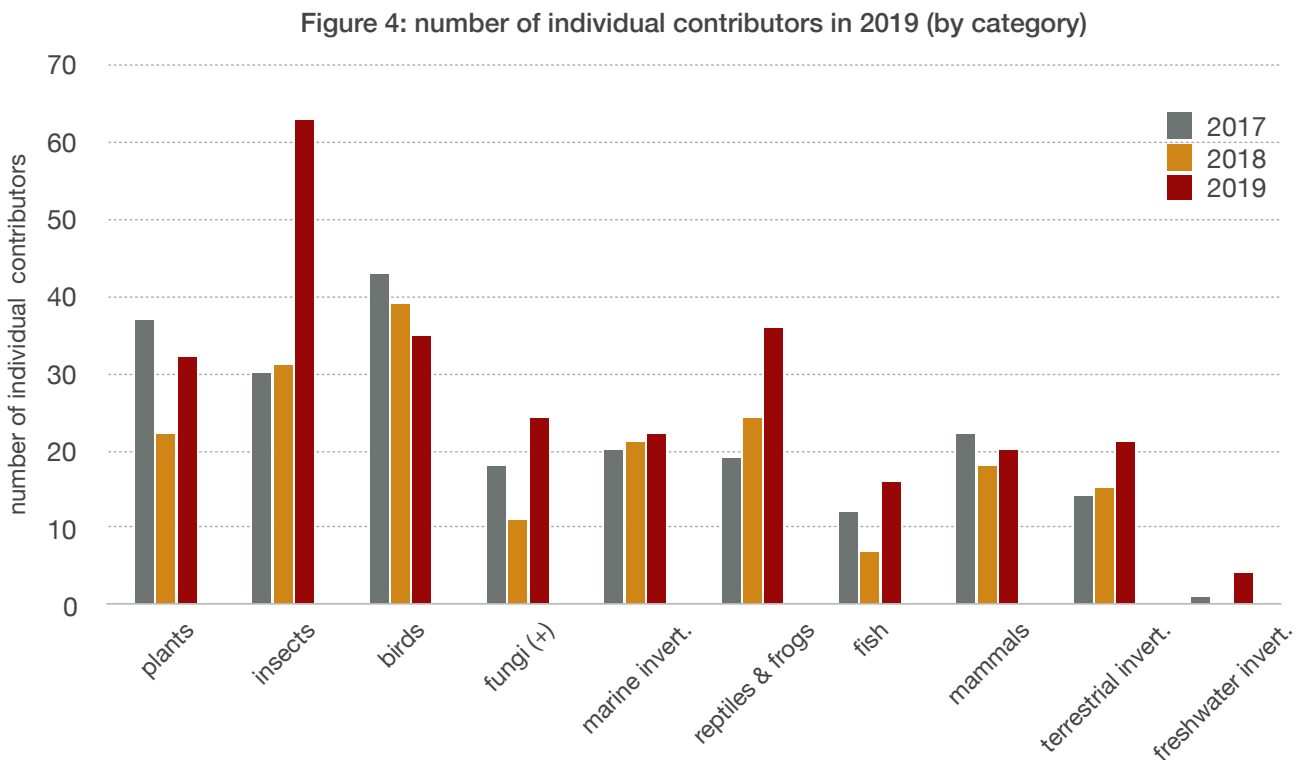
\* Note that these figures are based on identified sightings only. Most categories include additional sightings awaiting confirmation. The figures are to 26/11/19, so 2019 numbers will increase.

### Contributors

The total number of contributors for this year was 108, up 32 per cent on the previous year (Fig. 3). Half of the 2019 contributors were ‘new’ – having not added sightings in the preceding two years.



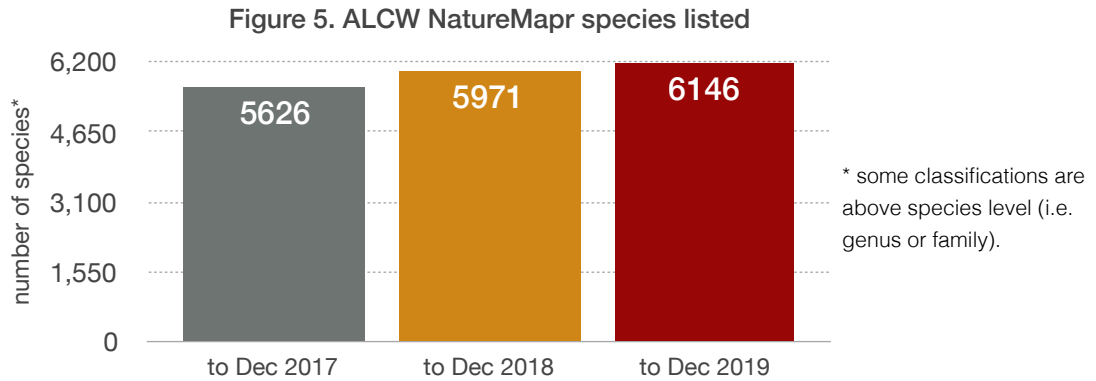
Some contributors specialise in recording sightings in particular categories, while other people record a diverse array of taxa. The large increase in contributors of insect sightings is quite remarkable (Fig. 4)



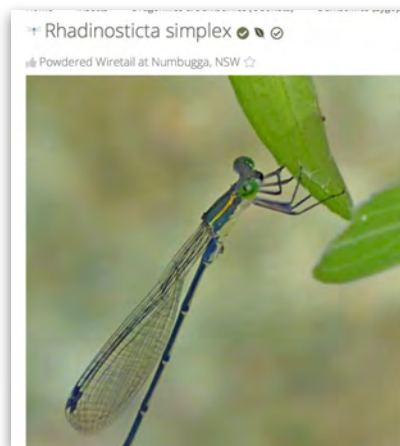


## Species lists

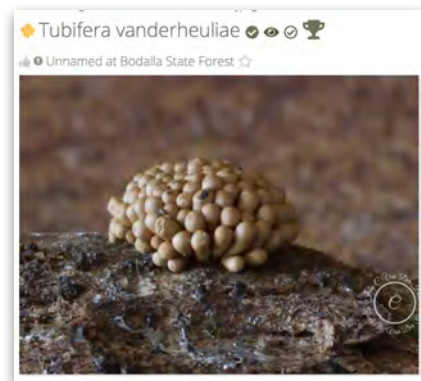
Although there are already thousands of species listed in ALCW *NatureMapr* (see Table 1), contributors are regularly adding new ones (Fig. 5). And not only new to our lists, but sometimes even new to science. Occasionally sightings are flagged by our moderators as ‘significant’. Typically this reflects the rarity of the sighting or of the species itself.



A beautiful bee, endemic to eastern Australia. Sightings are increasingly rare as the species has disappeared from parts of its former range. Maggie Clowes, #4235014 (15/9/19)



Max Campbell has greatly improved the dragonfly/damselfly field guide this year, adding images of females, males and immatures. This one, however, was a totally new species for the lists. Max Campbell, #4185946 (14/1/19)

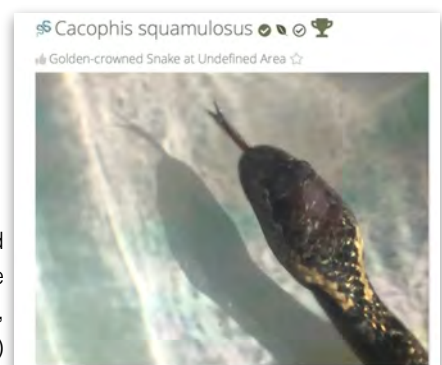


A new species of slime mould (Myxogastria), discovered by ALCW moderator Teresa Van Der Heul in 2018, and scientifically named this year. Teresa van der Heul, sighting #4233043 (added 24/8/19)



Southern Brown Bandicoots are Endangered AND rarely active during the day. Ryu Callaway, sighting #4235693 (17/9/19)

A small snake usually only found north of Wollongong, but here in the ranges behind Narooma. Narelle, sighting #4228347 (10/6/19)

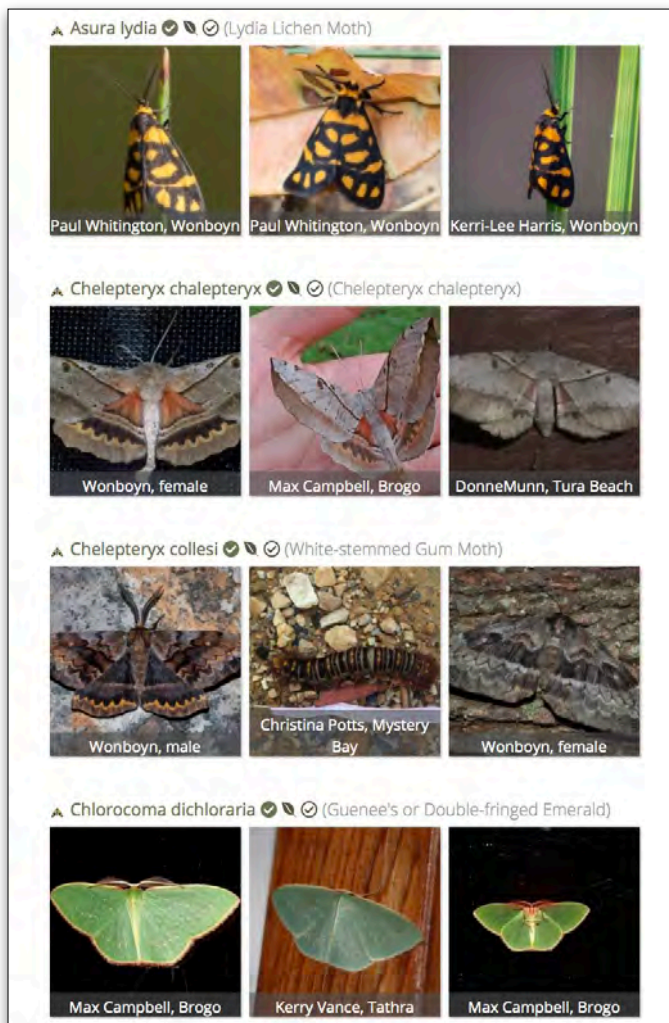


## Perspectives from a few key users

Statistics alone don't adequately describe the value of the *NatureMapr* records. We invited a few of our moderators to describe their experiences and impressions of 2019.

### Glenn Cocking, on building the field guides

*"It's been great to see many new records of moths with photos to fill out the long list of past records of moths back to 2013 that don't have photos. Scanning through "Common Moths", most species have a full house of three different photos to consult when identifying a new record, and of course many species have far more than three records. In the family categories of larger moths, for example the Geometridae, around half the species now have a photo record. Things are less advanced with the micromoths, but the accumulated number of species illustrated with photos has nevertheless increased."*



Some of the 80 species in the Common Moths field guide. The full moth species list on *NatureMapr* is now over 850 ... making the Common Moths list very useful.



Moth light sheet survey, April 2019 (Wonboyn)

Glenn Cocking has been a moderator with ALCW since the beginning. He has contributed 1100 moth sightings of his own and identified more than 300 others. Glenn lives in Canberra and works on the moth collection in the Australian National Insect Collection. He frequently visits the region and generously conducts moth surveys as part of ALCW events. We are privileged to have Glenn's involvement in ALCW, without which the identity of our many local species would remain a mystery.

**Jackie Miles, on recording post-fire regeneration, flowering times and rare plants**

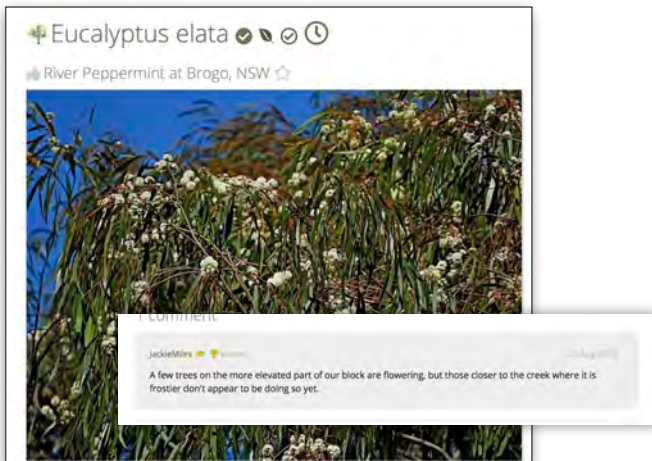
*"The main ways I have contributed in the last year have been in the areas of post-fire response (with interesting responses to the Yankees Gap Rd fire on our place and on the cliffs out the back of us, and to the Tathra fire) and rare plant surveys, plus a few comments on odd timing of flowering possibly as a response to the drought. I've been conscious of the need to document flowering times of potential flying-fox food trees such as eucalypts/bloodwoods and try to get a photo when I first notice the local eucs starting to flower (although of course end of season flowering dates also matter)."*



Distribution Map view in *NatureMapr*, showing plant records in Yankees Gap region in 2019. This information is the result of the continuing efforts of Jackie and Max in surveying the region.



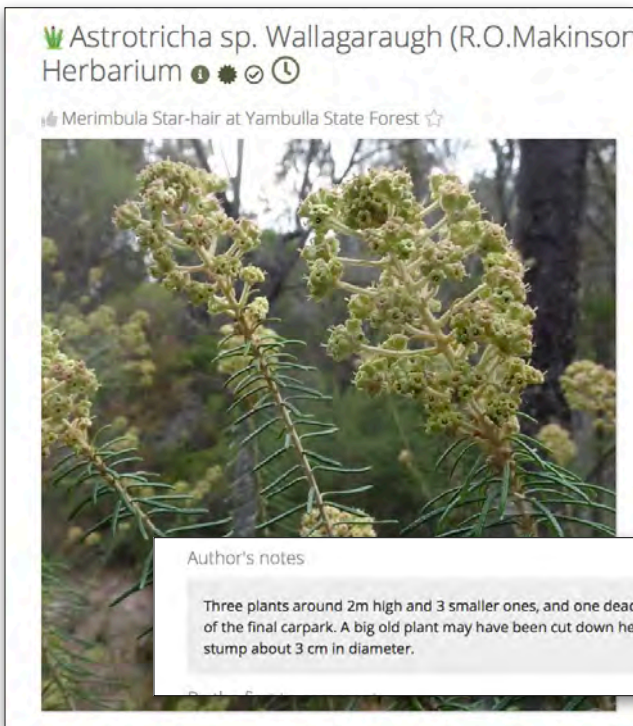
Example of a post-fire sighting on *NatureMapr*, just one of hundreds of such records added by Jackie this year. ([weblink](#))



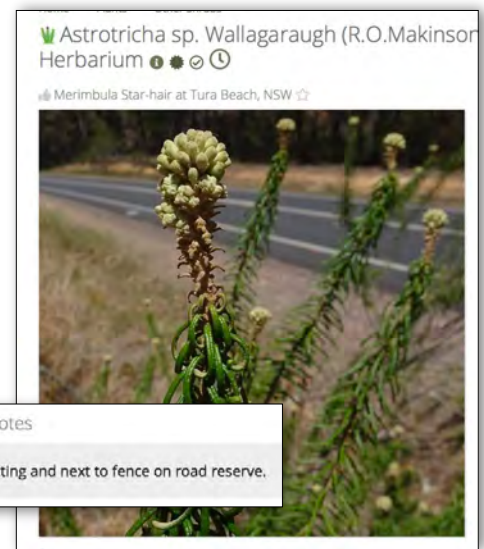
Example of a record of 'first-flowering'.

### Jackie Miles, on the Endangered Merimbula Starhair

*“I have done surveys professionally of Merimbula Starhair (Astrotricha sp. Wallagaraugh) around Tura Beach for Council and the Wallagaraugh River for OEH (as was). I put some sightings from each area surveyed onto ALCW, so that a good geographic spread of where the species occurs is now obtainable using the mapping function. Putting up every single record would have been time-consuming and not really necessary. The records which had already been submitted for this species were useful in deciding where to survey.”*



Examples of Jackie's recent *NatureMapr* records, including valuable comments, abundance and flowering data.

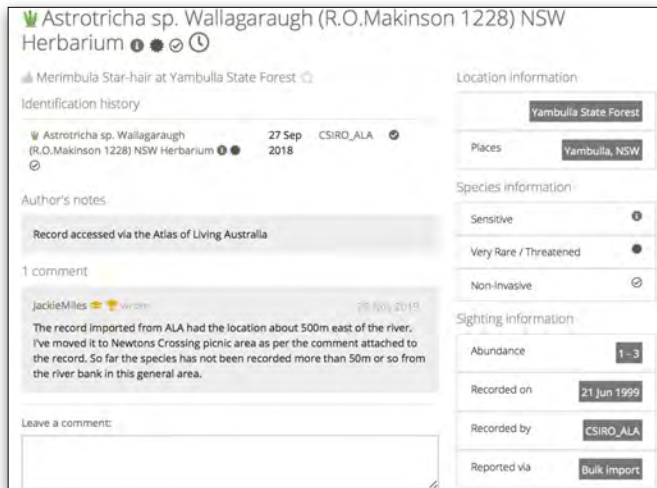


The 'Merimbula Starhair' has been formally declared an Endangered Species. It is known from only a few locations, including a small region in Yambulla State Forest and strip of near-coastal land north of Merimbula. The ALCW *NatureMapr* database contains 164 records of the plant, including 78 during the latest peak flowering period (Nov. 2019). Precise location data for threatened species is treated as 'Sensitive'. That is, the location data is recorded in *NatureMapr* but only accessible to authorised persons. In this way the database can be both a publicly usable tool and a valuable resource for researchers and environmental managers. ALCW has collaborated with the NSW Government Threatened Species Unit and OEH to raise community awareness of this species, and to gather information about potential pollinators.

Jackie Miles' local botanical knowledge is invaluable. In 2019, Jackie (together with Max Campbell) contributed over 1300 plant sightings - 84% of all plant records for the year

## Jackie Miles, on the utility and benefits of the database

*“While checking the ALCW map for Merimbula Starhair, I found some dodgy looking records in areas where the species has not been recorded to my knowledge. On checking the details of these I found they had been backloaded from ALA, having originated probably from herbarium records, with the location somehow shifted in the process.”*



Example of a record from 20 years ago, corrected on the basis of local knowledge. During Dec 2018, thousands of records from trusted sources were imported into ALCW NatureMapr.

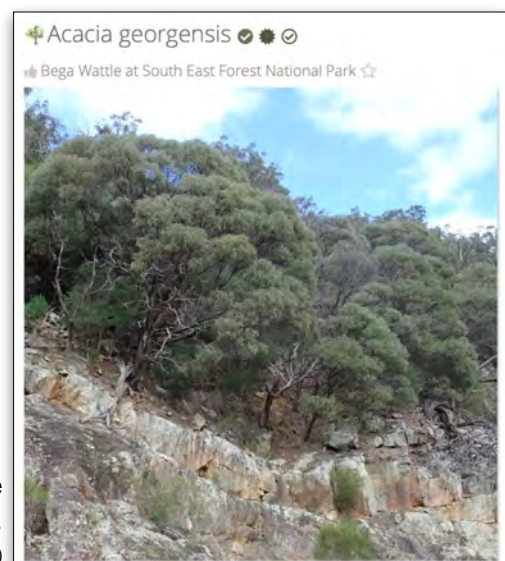
*“Fortunately the records had notes with them stating where the collection came from (either Sapphire Coast Drive road verges or Newtons Crossing picnic area) so I was able to edit the sightings to put the dot on the map in a more plausible location that fitted the notes. I added a comment to the record to indicate I had done that.*

*Would that it was so easy to correct dodgy records on other databases such as Australia’s Virtual Herbarium and OEH’s Bionet database!”*

*“I hope that ALCW can develop the reputation of being the go-to location for accurate records of rare plant locations. I also appreciate how much easier it is to upload records to it, compared with the cumbersome and error-message laden ordeal of getting records into Bionet.”*

*“Bega Wattle (Acacia georgensis) is another listed threatened species I surveyed for, which I suspect ALCW now has a more accurate record of location than the Bionet database.”*

April 2019 record of *Acacia georgensis* and “the most southerly known stand of this species”.  
(Jackie Miles, NatureMapr record #4206589)



### Paul Whittington, on developing a home list

*“Our NatureMapr activities in 2019 have led to a significant improvement in our knowledge of the level of biodiversity in the 4ha patch of native forest in which we live. During 2019 we added 131 new moth species, bringing our total number of identified home moth sightings to 227. This large increase can be attributed to two intensive sessions where we set up a lightsheet overnight to attract moths.*

*Glenn Cocking, the moderator for moths on ALCW and CNM, encouraged us to undertake these recording sessions. He brought and set up the equipment and worked with us through the night as we photographed moths on the sheets. He subsequently spent hours helping us identify the moths we had photographed on those two evenings. The identification of species photographed on the second night continues and our final tally of new home species will almost certainly grow.”*



Some of the moths from Paul's sightings page on *NatureMapr* (23 October, 2019)

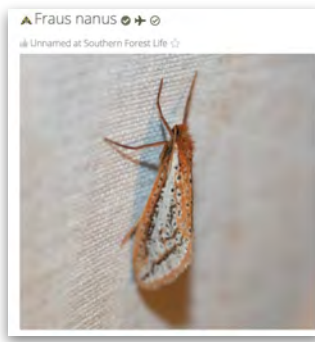
## Paul Whittington, on contributing to biodiversity knowledge

*“New insect sightings on our block in 2019 include 60 new species for ALCW NatureMapr. These species were spread across 8 different orders (33 moths, 10 bees & wasps, 6 beetles, 6 flies, a cockroach, a webspinner, a bug, and a katydid).*

*Several of these new species have fewer than 20 records on the Atlas of Living Australia. These include Coptaspis sp., Woodland Katydid (15 records); Macrones besti, a longhorn beetle (14 records); Eulechria electrodes, an oecophorid moth (12 records); Fraus nanus, a hepialid moth (6 records, all in Tasmania) and Chondropyga olliffiana, Oliff’s flower scarab beetle (0 records).”*



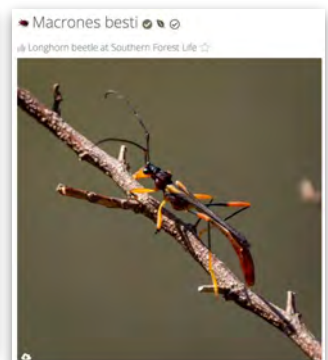
Sighting #4197109 (9/2/19)



Sighting #4230131 (4/4/19)

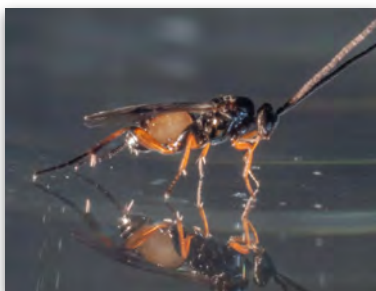


Sighting #4208569 (6/5/19)



Sighting #4237268 (3/10/19)

*“One of the new insects we found on our block in 2019 turned out to be not only new to us, but to science as well. This is a tiny wasp, which emerged along with 30 siblings from a caterpillar that had been parasitised by their mother. We sent several of these wasps to a taxonomist, Dr Erinn Fagan-Jeffries at the University of Adelaide. Erinn is an expert in the Microgastrinae, the wasp subfamily to which these wasps belong. She carried out DNA barcoding to confirm they are a new species and has recently submitted a manuscript describing this and a number of other related species for publication. She gave us the opportunity of choosing the species epithet for our new wasp species and we thought the name of the village close to our block would be an appropriate choice. So the new species will be called Cotesia wonboynensis - the wasp from Wonboyn.”*



Sighting #4204605 (24/3/19).

*Cotesia wonboynensis.* Paul describes the full story in an [Occasional Paper](#) on the ALCW website.

Paul Whittington first became an active contributor to ALCW NatureMapr in February 2018. With a background in invertebrate biology, he was soon welcomed onto the moderator team. In less than two years he has contributed 1142 sightings, including nearly 800 insects and more than 100 spiders.

### Max Campbell, on local field guides for naturalists

*“I do like a good regional field guide and in both my ALCW roles as contributor and tyro moderator, the more comprehensive the better. I’m delighted to find that our species data base is becoming a good regional field guide in so many areas of nature study. It often has excellent type photos of a species of interest and adds value in that it provides, via its burgeoning sighting history, specific times of year and places where you might find them.*”

*My interest in nature study has grown to complement my original enthusiasm for nature photography. My thanks here are due to Kerri and Paul for organising and energising the “Atlas Naturalists” and the inspiring talks given by our local expert naturalists and the Canberran visitors who come down here to give talks and join our field trips. As an aspiring naturalist I am coming to appreciate our ALCW data base not only as a useful commodity in the research of a theoretical future scientist, but also as a tool I can use now in my own projects.”*

#### Butterflies (Lepidoptera)

A few of the 67 local butterfly species in the field guide. The list can be searched in full, or by family. This shot shows 4 of the 21 species in the family Nymphalidae. All photos were taken locally by ALCW NatureMapr contributors.

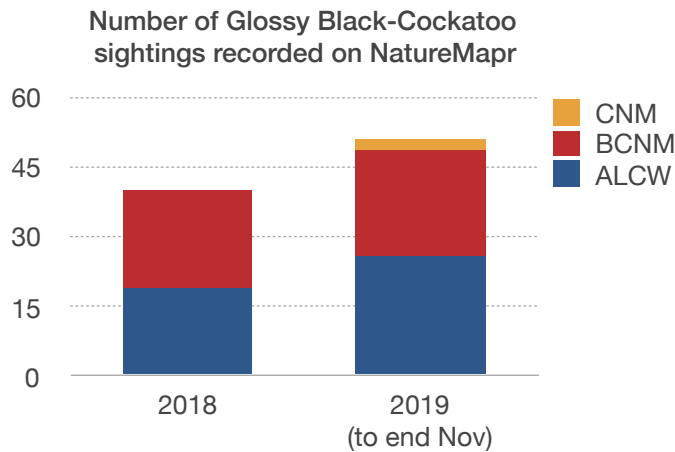
Max Campbell is a keen and skilled nature photographer. His patience and observation in the field mean that he often sees – and photographs – the small creatures most people overlook. Max has contributed over 630 insect sightings in the last 3 years, and over 300 in 2019 alone.



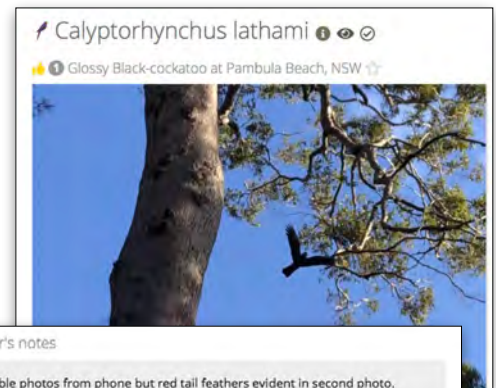
## 3. PROJECTS

### Mapping Glossy Blacks

*Mapping Glossy Blacks* was created as a long-term project, in collaboration with OEH and adjacent *NatureMapr* groups, Canberra Nature Map (CNM) and Budawang Coast Nature Map (BCNM). ALCW created and promoted supporting resources via our website. The Project aims to enhance what is known about the southern distribution and behaviour of this threatened species. It is also an opportunity to build community awareness of the birds' very specific feeding and nesting requirements.

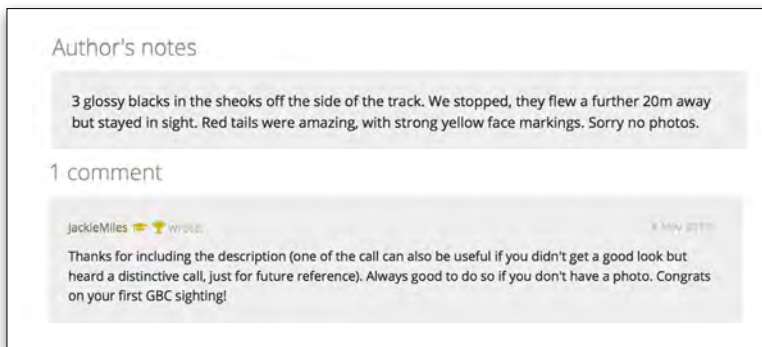


Feeding traces are important records, with or without the birds in sight. ALCW sighting, 31/8/19



Author's notes  
Terrible photos from phone but red tail feathers evident in second photo. Feeding on Allocasuarina

Photos of birds are difficult with phone cameras, but accompanying notes are enough to give moderators confidence in the identification. ALCW sighting, 22/8/19.



This highlights the flexibility of the system. It enables validation of sightings without photos and from all members of the public, not only the more expert birdwatchers. ALCW sighting in Bermagui, 6/11/19 .

The *Mapping Glossy Blacks* project is ongoing and we look forward to collaborating further with National Parks and the Threatened Species Unit in monitoring these Vulnerable populations.

## Beach Weeds

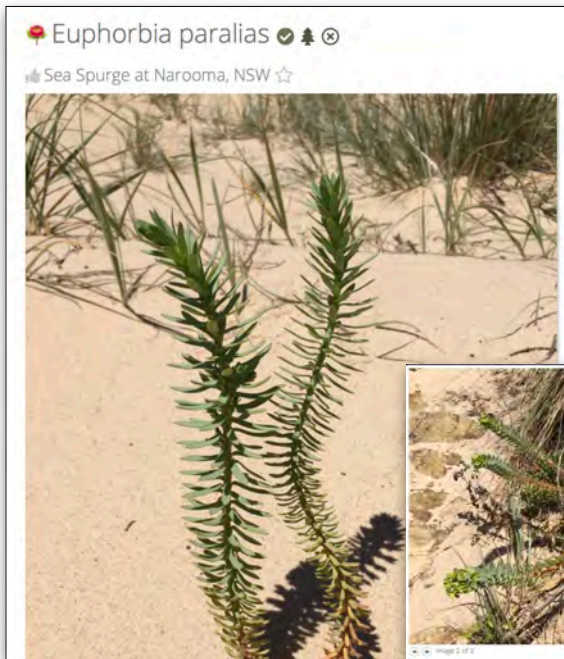
*Beach Weeds* is another long-term, collaborative project. ALCW is supporting local Councils, Landcare and the long-running Coastal Weeds Project. The aim is to encourage beach goers to keep an eye out for invasive weeds, to help them know what to look for, and to provide a means of reporting any suspicious plants they find growing in the beach dunes.

There is information on the ALCW website, a 'Target Species' list on *NatureMapr*, and signs were posted at local beaches last Summer.

	Number of NatureMapr records for 2019
Bitou Bush	4
Beach Daisy	0
Sea Spurge	1
Cape Daisy	2

This small number of reports might be seen as encouraging. Perhaps there are very few weeds escaping the eradication sweeps regularly undertaken by the Coastal Weeds team.

Of course, these *Beach Weeds* sightings are opportunistic. This is not survey data. We have no measure of how many people are searching, where or when. Nor do we know how many people are using the Project information, removing weeds, but not reporting them.



**Identification history**

- 20 Nov 2019: JackieMiles
- 18 Nov 2019: nickhepkins

**Author's notes**

Suspected Sea Spurge

**3 comments**

JackieMiles: indeedy. Is it possible to go back and do for it? Was there much? I could forward the link to this sighting to Eurobodalla Council weed guys.

nickhepkins: I GOT THEM ALL OUT

JackieMiles: Good on you. By the way, seedlings of the shrub *Leucopogon parviflorus* that grows on beach dunes can be mistaken for sea spurge, and your first photo does look a bit like that species. However the red base of the stem gives it away as spurge, plus the 2nd photo with it flowering. But before yanking them, it's always worth considering the seedling *Leucopogon* possibility.

The benefits of being able to check ID before removing a suspected weed.



**Identification history**

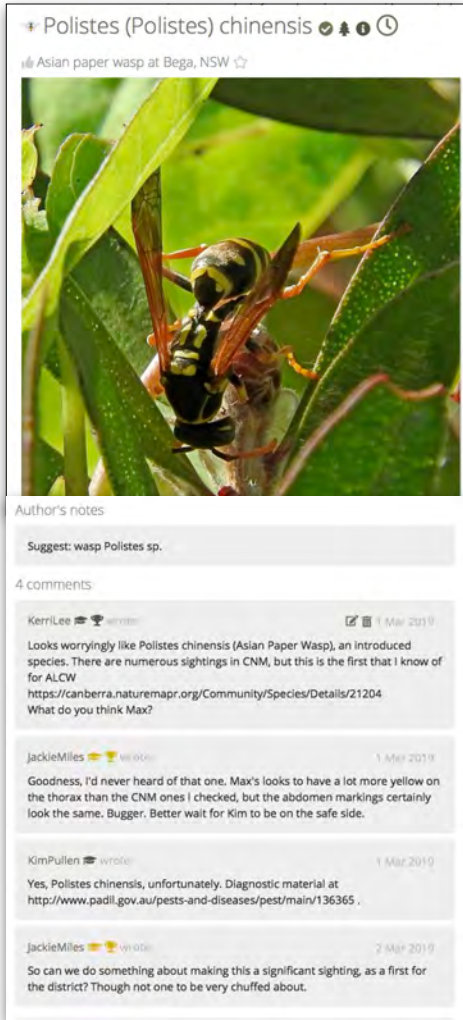
- 27 Apr 2019: JackieMiles

**Author's notes**

Just one seedling in the wet gully floor, pulled out. In post-fire regrowth. Fire appears to have burnt right through the gully floor here, which was probably dry at the time, though with standing water now, a year or so later.

## Know Your Wasps - the alert

In March 2019 we were alerted to the arrival of the Asian Paper Wasp (*Polistes chinensis*) in the Bega Valley. Early sightings were recorded on *NatureMapr* and species identification confirmed.



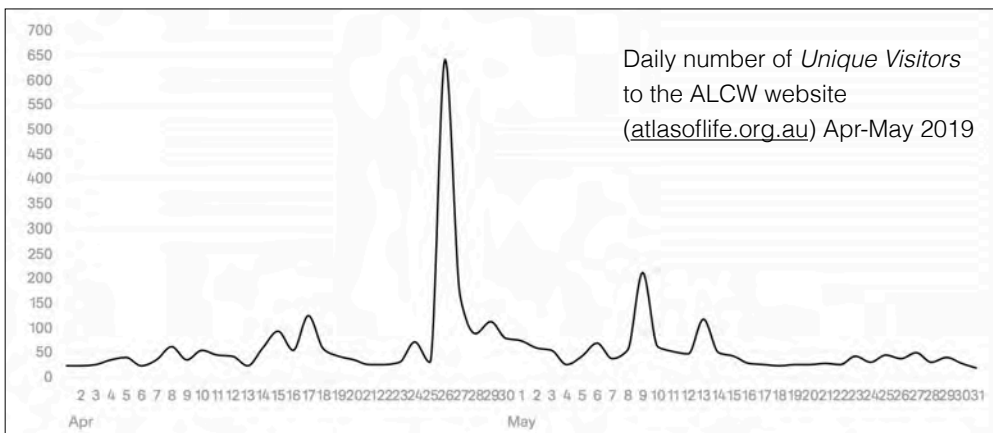
We liaised with Bega Valley Shire Council to alert the community to the ecological risk this species poses – and to the ways in which everyone can help to control its spread.

A detailed 'Wasp Alert' page was created and published on the ALCW website on 14 April. This was subsequently shared via the ALCW Facebook, Council channels, and the ALCW Newsletter. Updated information was published on 8 May and Kerri-Lee Harris gave an interview on ABC South-east on 11 May.

Reports during April and May confirmed that the insects were establishing along the Bega River, close to town. Worryingly, sightings have been made again this Spring.

The first sighting of the Asian Paper Wasp recorded on ALCW *NatureMapr*. (Sighting made by Max Campbell on 14/2/19, recorded on 1/3/19)

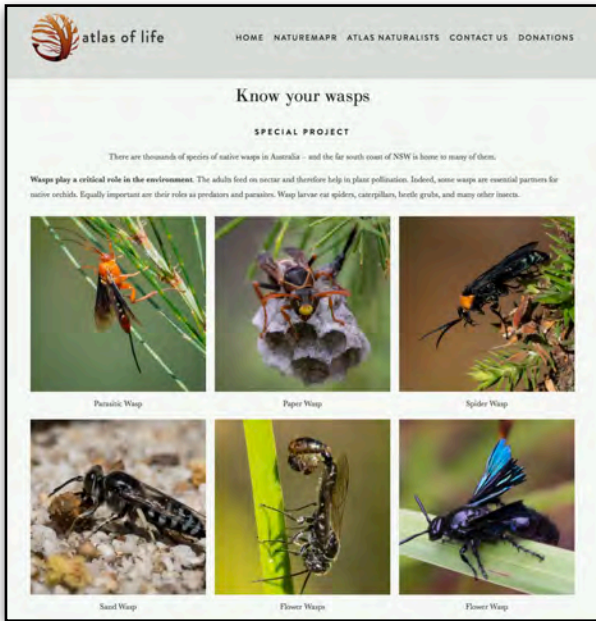
Single wasp with nest sighted at Kisses Lagoon. (Sighting by Max Campbell on 31/10/19, nest and wasp destroyed a few days later)



The campaign did appear to be effective in reaching large numbers of people. Council sources reported very high numbers of 'hits' on social media and the site visit statistics for the ALCW website tell a similar story.

## Know Your Wasps

The importance of helping people to recognise and value local, native wasp species was highlighted by the ‘Wasp Alert’ initiative. We wanted to avoid people killing every wasp they saw. In addition, the risk that the invading Asian Paper Wasp poses is an ecological risk. They displace local wasps and other insects and thereby disrupt natural ecosystems.



A detailed information page has been created on the ALCW website. All images used were taken locally. The aim is to provide an accessible resource that schools, Council and other organisations can use in education and awareness programs.

A good example of this happening was the ‘Good Wasp, Bad Wasp’ Program run by the Bournda Environmental Education Centre (BEEC) in August.



The resources featured the website, and the information and images formed the basis of a range of activities and learning resources. Atlas members Paul Whittington and Kerri-Lee Harris also ran sessions at the BEEC as part of the Creative and Talented program.

Students will become citizen scientists and investigate what wasp species are found in our area. The focus will be on learning to distinguish valuable native wasps, that contribute to pollination and pest predation, from introduced species that can be harmful to humans and other living things. In the weeks before the workshop Bournda EEC staff will deploy wasp traps to participating schools in the Bega Valley and students will examine what has been found using the Atlas of Life digital microscope. Students will use working scientifically skills and design and production skills to build their own wasp trap and investigate what baits work best for different species. At the conclusion of the workshop students will be able to return to school equipped to monitor what wasp species are found in the school grounds and to share their findings with other schools using NatureMapr.

Extract from BEEC website, promoting the August 2019 program to schools.

We have recently encouraged Council to organise another Wasp Alert, targeting people living close to the Bega River. *Polistes chinensis* colonies will grow throughout the Summer, so the best time to eradicate them is now.

## Sea Slug Census

Since 2017 the ALCW has been taking part in regular searches for sea slugs as part of an east coast project initiated by researchers from Southern Cross University. This has helped to build our local records to 90 species and 567 sightings. The surveys also provide valuable information about the southward range extension of more northern species.

The 2019 Sea Slug Census was held in January, a departure from the previous years of Autumn surveys. The overall pattern of species types found was very similar (Table 2).

**Table 2. number of species sighted by superfamily**

superfamily	April 2017 SSC	April 2018 SSC	Jan 2019 SSC
Acteonoidea	3	2	2
Aplysioidea	4	6	5
Cephalaspidea	4	3	3
Doridoidea	1		1
Limapontioidea		1	2
Nudibranchia	10	13	10
Philinoidea		1	
Plakobrachoidea	1	3	1
Pleurobrancoidea		2	
Umbraculoidea		1	
<b>Total no. species</b>	<b>23</b>	<b>32</b>	<b>24</b>

There were seven species recorded in the 2019 survey that were not detected during the Autumn censuses, including two nudibranchs that were new species for ALCW *NatureMapr* lists.

Found on Merimbula sand flats. A tiny nudibranch (7mm long), reportedly a predator of other sea slugs. Libby Hepburn (11/1/19), sighting #4190682. A first for the ALCW database.



Also found in the Merimbula River estuary. Probably feeds on bryozoans. Matt Nimbs (12/1/19), sighting #4184522. A first for the ALCW database.

## 4. EVENTS & ACTIVITIES

Each year ALCW organises and participates in a range of community events and activities. The 2019 calendar was particularly busy, in large part due to the launch of *Atlas Naturalists*. The *Bega River BioBlitz* in August was also a major event involving many volunteers and contributions from members. The *Insect Ramble in Eden* was another a significant event, held as part of the Wings of Spring weekend in early November.

### 2019 ALCW calendar of events

11 Jan	<b>Wild Eye photo exhibition</b>	Winners of the ALCW 2019 <i>Wild Eye Photo Competition</i> were announced at the launch of the exhibition, hosted at Eye-Q in Merimbula.
12-20 Jan	<b>Sea Slug Census</b>	An annual event and part of an ongoing state-wide project (further details, see page 21 of this report).
15 Feb	<b>Atlas Nats meet-up</b>	First meeting of the newly-formed Atlas Naturalists group. Social activity and introductions, held at Tathra Hotel.
20 Feb	<b>Senior's Festival</b>	Display stand and activities at the <i>Never Too Late Exhibition</i> , coordinated by BVSC as part of <b>Senior's Week</b> .
2 Mar	<b>Atlas Nats Field Day</b>	Nature walk and bioscan at Nelson Beach and Wajurda Point
22 Mar	<b>Atlas Nats Workshop</b>	<i>Insects to Order</i> presentation and workshop (Tura Marrang Library)
7 April	<b>Atlas Nats Field Day</b>	Nature walk and bioscan at Bemboka Reserve
12 April	<b>Atlas Nats Workshop</b>	Waterbug Sampling workshop (Tura Marrang Library)
4 May	<b>Atlas Nats Field Day</b>	Nature walk and bioscan at Box Cutting Rainforest
10 May	<b>Atlas Nats Workshop</b>	<i>The Diversity &amp; Ecology of Fungi</i> presentation
2 July	<b>Kiah Community Day</b>	Display stand and presentation at this community event organised by BVSC.
7 July	<b>Atlas Nats Field Day</b>	Nature walk and bioscan at Goodenia Rainforest
10 Aug	<b>Atlas Nats Workshop</b>	A special event held as part of <b>National Science Week</b> . <i>All Things Arachnid</i> workshop (Tura Marrang Library)
16-18 Aug	<b>Bega River BioBlitz</b>	The central event of <b>National Science Week</b> in the Bega Valley. Coordinated by the Sapphire Coast Regional Science Hub, ALCW and BVSC.
15 Sept	<b>Atlas Nats Field Day</b>	Nature walk and bioscan at Green Cape, Ben Boyd NP.
21 Sept	<b>Atlas Nats Workshop</b>	<i>Orchids with David Jones</i> presentation (Tura Marrang Library)
5 Oct	<b>Atlas Nats Workshop</b>	<i>Geology</i> presentation (Tura Marrang Library)

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## PART 4: EVENTS

15 Oct	<b>Matted Bush-pea survey</b>	Coordinated by BVSC, involving OEH and the local community. ALCW was well represented on the day.
26 Oct	<b>Cobargo 1st Scouts Bioscan</b>	Insect bioscan led by ALCW representatives, supporting troop members in obtaining their Scout 'Science Badges'.
9 Nov	<b>Atlas Nats Workshop</b>	<i>Pollinators and Insectivorous Plants</i> presentations (Tura Marrang Library). Part of <b>WINGS OF SPRING</b> , an annual event organised by ALCW.
10 Nov	<b>Insect Ramble in Eden</b>	Nature walk and bioscan at Lake Curalo Foreshore Reserve. This was a special collaborative event hosted by BVSC and ALCW as the central event of <b>WINGS OF SPRING 2019</b> .
7 Dec	<b>Atlas Nats Field Day</b>	Marine Field Day and bioscan at Bermagui.

## Atlas Naturalists

The ALCW Committee encouraged and approved the formation of *Atlas Naturalists* as a sub-group of the organisation. The initiative was launched in February 2019. The Committee recognised the benefits of creating regular opportunities for local people to come together to share their knowledge and interest in nature across our region.

**In the nine months since its launch, *Atlas Naturalists* has attracted 114 members.** Some have been ALCW members for years, but many others are new. Some are active contributors of sightings to *NatureMapr*, others are new users of the database or are more interested in the activities and presentations than in contributing sightings. There are people of all ages and backgrounds. There are highly experienced biologists and ecologists, along with many general naturalists and other people simply interested in learning more about nature in our region. There are no membership fees, and events are free of charge. Events are promoted widely and anyone is welcome to attend.

As a recognised sub-group of ALCW, *Atlas Naturalists* activities reflect and promote the overall objectives of ALCW. The *Atlas Naturalists* coordinator is a member of the ALCW Committee, provides regular reports to the Committee, and the group's activities are covered by ALCW public liability insurance.





## Bega River BioBlitz

This was the central event for National Science Week in the Bega Valley. Coordination was shared between Bega Valley Shire Council, Sapphire Coast Regional Science Hub and Sustainability Education Network, and ALCW.

The Bioblitz was held over three days, 16-18 August 2019. The event included surveys of the river and surrounds – freshwater insects and other animals, riverside vegetation, birds, mammals and reptiles (Table 3).

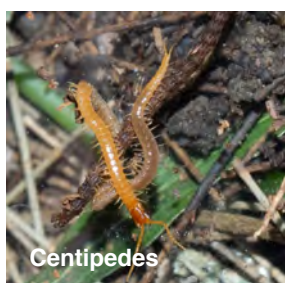
A total of 285 different species were recorded.

**Table 3: Bega River BioBlitz sightings**

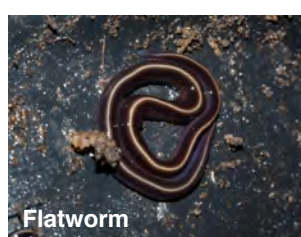
	number of sightings recorded
Plants	236
Bird	196
Mammals	16
Reptiles and frogs	16
Insects	96
Terrestrial invertebrates	41
Molluscs and other freshwater invertebrates	13

The Schools' Day on 16th August contributed many sightings in and around the river. Several schools participated, involving many students across a wide range of age groups. These activities were coordinated and led by staff from the Bournda Environmental Education Centre, supported by ALCW members and visiting scientists.

Some groups searched for insects and other terrestrial invertebrates in the vegetation near the river. Others conducted 'waterbug surveys', using nets to sample different parts of the river.



Just a few of the invertebrates discovered by local school students during the BioBlitz Schools' Day.



## Wings of Spring

This was the second year we have held a *Wings of Spring* weekend. The feature event this year was the *Insect Ramble in Eden* held on Sunday 10th November at Lake Curalo Foreshore Reserve. ALCW partnered with BVSC to promote and host the day.

There were several aims for the event. The Insect Ramble was a bioscan. That is, we sought to document all the insects we could discover, plus any other invertebrates such as spiders. It was an opportunity for people of all ages to spend time in the field with experienced entomologists and ecologists. And it was also a chance for local people to become more familiar with the biodiversity of the lakeside reserve.

Despite a cool and windy day, nearly 30 people took part and **86 invertebrate species were recorded**. All sightings were recorded on *NatureMapr* and a [full report published](#) on the ALCW website.

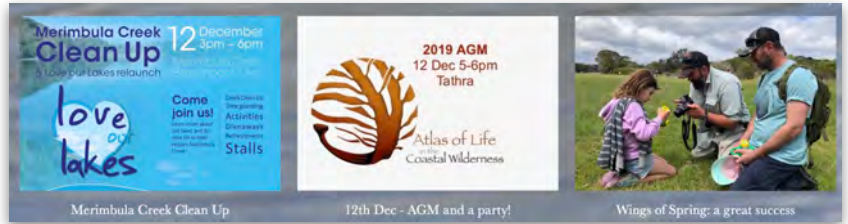


## 5. COMMUNICATIONS

The ALCW website ([www.atlasoflife.org.au](http://www.atlasoflife.org.au)) is central to our communication strategy.

### NEWS & EVENTS

Both ALCW and related external announcements. These display for a limited time.

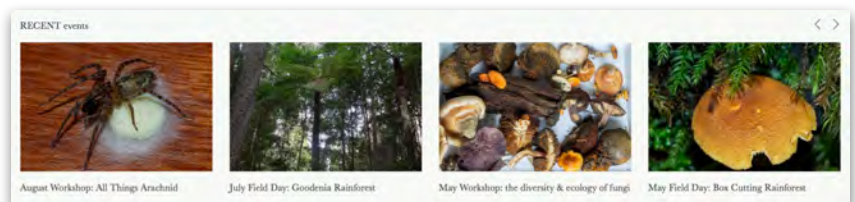


### SNAPSHOTS SERIES

Highlights from recent *NatureMapr* sightings published every 2 or 3 months.

### ATLAS NATURALISTS

A summary report is prepared after each event and often includes further information and resources.



### LOCAL STORIES

Short photo-essays provided by ALCW members.

### PROJECT INFORMATION

Full details of special projects, bioscan & BioBlitz reports, resources and occasional papers written by members.



The website receives over a thousand visitors each month. Site reports show the effect of the newsletter and other major promotions.



Website analytics show 11,500 unique visitors to the website in the 2019, up to 1st Dec.

The spike in the number of visitors in April 2019 coincides with the Wasp Alert project.



Website analytics for November 2019, as a sample month. There were over a thousand different visitors. Note that over 90 people visited the site on 15th November, the day a newsletter was sent out.

**Newsletters are emailed to the entire ALCW membership list, one per month on average.** These are sent via Mailchimp and provide links back to pages on the ALCW website and, in some cases, directly to *NatureMapr* sightings of particular interest.

11 newsletters were sent in 2019, plus 3 special announcement emails.  
[Past issues available online](#)

### Email Campaign Archive

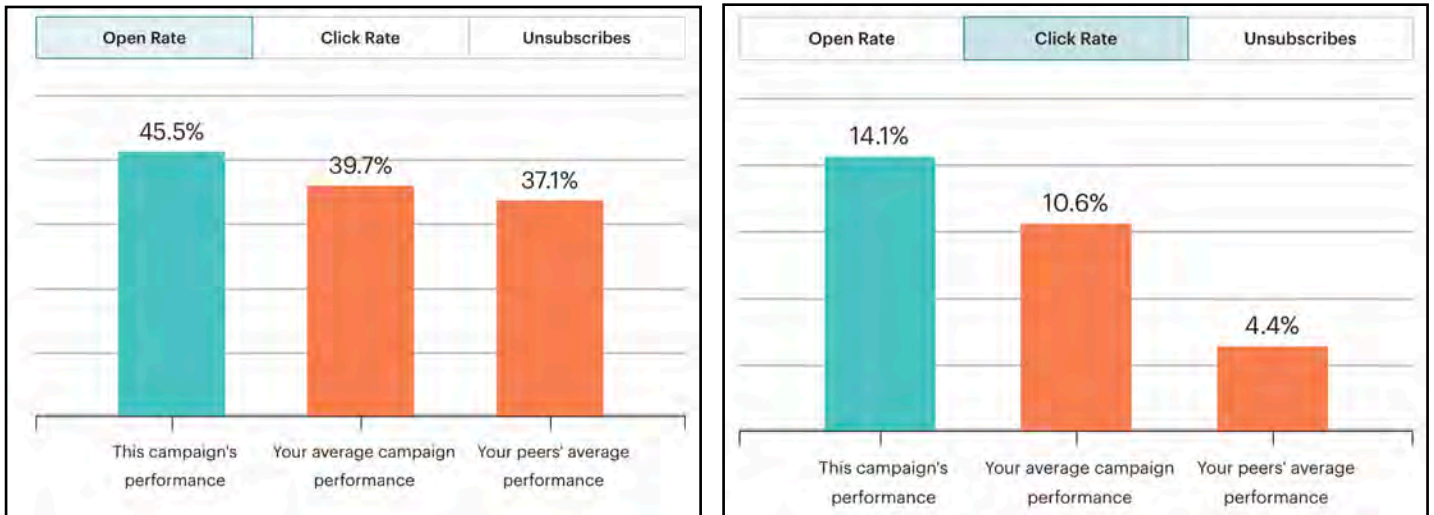
from Atlas of Life in the Coastal Wilderness

[join our mailing list](#)

- [30/11/2019 - AGM and party, 12th Dec, Tathra](#)
- [15/11/2019 - Atlas of Life Newsletter 15th November 2019](#)
- [29/10/2019 - Wings of Spring 2019](#)
- [02/10/2019 - Atlas of Life Newsletter 2nd October 2019](#)
- [11/09/2019 - Atlas of Life: upcoming events](#)
- [06/08/2019 - Atlas of Life Newsletter: 6th August, 2019](#)
- [29/06/2019 - Atlas of Life Newsletter: 30 June, 2019](#)
- [08/05/2019 - Atlas of Life Newsletter: 8 May, 2019](#)
- [17/04/2019 - Atlas of Life Newsletter: 17 April, 2019](#)
- [17/03/2019 - Atlas of Life Newsletter: 17 March, 2019](#)
- [13/02/2019 - Atlas of Life Newsletter: 13 Feb, 2019](#)
- [13/02/2019 - Atlas of Life Newsletter: 13 Feb, 2019](#)
- [31/01/2019 - Atlas of Life Newsletter: 31 Jan, 2019](#)
- [06/01/2019 - Atlas of Life Newsletter: 6 Jan, 2019](#)

Mailchimp reports show that around 10 cent of recipients click on links to articles on the website. About 40 per cent of email recipients open the email.

Newsletter campaign statistics available from Mailchimp. This example is for the November Newsletter. The reports show the proportion of the 635 email recipients who opened the email (left), and the proportion who subsequently clicked on at least one link in the newsletter (i.e. opened the full story on the ALCW website)(right). The November newsletter performed better than our average. Note too that our average response rates are better than those for campaigns by similar non-profit organisations (right hand column in each graph).

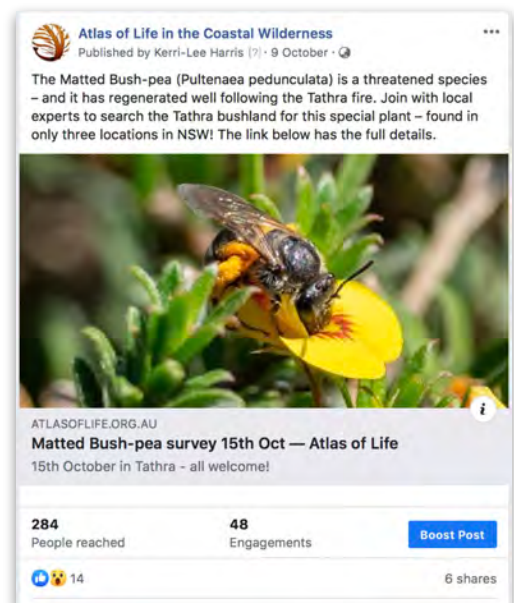


**The ALCW website is also used to help promote selected, external events and initiatives.**

Selection is based on shared aims and concordance with objectives of the ALCW as a not-for-profit, non-political, environmental organisation. This year we promoted: *Waterbug Blitz* (a national project); *Eastern Curlew talk* in Bermagui (National Trust); *Wild Pollinator Count* (a national project); *Citizen Science ACT Launch* (ACSA); *'Extinction' Threatened Species Exhibition* (OEH); *Hakea taxonomy article* (Taxonomy Australia); *'Signs of Wildlife' collection* (BVSC); *Matted Bush-pea Survey* (OEH & BVSC); *Merimbula Creek Clean Up* (BVSC); *Merimbula Star-Hair Seed Day* (OEH & BVSC).

**Many of the website stories and events are pushed to the ALCW Facebook page.** Facebook has the obvious advantage of onward dissemination through social sharing.

Our Facebook audience overlaps the newsletter mailing list but it is not the same. Facebook reaches people not on our mailing list, and yet not everyone is comfortable using Facebook. Therefore it is worth including both in our communication strategy.



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This report was prepared on behalf of the ALCW community.

Thank you to Patricia Daly for exporting *NatureMapr* data and for preparing the Bega River BioBlitz summary table.

Special thanks to Glenn, Jackie, Paul and Max who lent their voices to the document, sharing their impressions of 2019 as *NatureMapr* users and moderators.

This is a public document and people are encouraged to share it with interested individuals and organisations. It can be downloaded from the ALCW website [www.atlasoflife.org.au](http://www.atlasoflife.org.au)

Every effort was made to present a factual and accurate overview of ALCW activities for 2019. Any errors or omissions are mine.

*Kerri-Lee Harris*  
*ALCW Chair, December 2019*

