

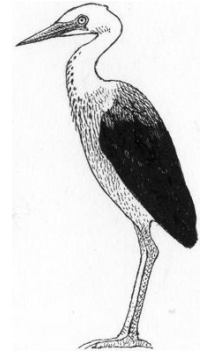


EUROBODALLA NATURAL HISTORY SOCIETY

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WINTER 2016

The Bassian Thrush (*Zoothera lunulata*) – Latham 1801

Taxonomy, distribution and habitat

The genus *Zoothera* incorporates the Australasian radiation of the Family Turdidae, the old world thrushes. About 15 species are recognised in this genus, two of which, the Bassian Thrush (*Z. lunulata*) and the Russet-tailed Thrush (*Z. heinei*), are found in Australia. The two species are closely related, differing only slightly in plumage, but are found at different elevations where their ranges overlap. The Bassian Thrush is the more cold-tolerant species, occurring from sea level in southeastern Australia from South Australia and Tasmania to Queensland. However, in the northern parts of their range, in South East Queensland, they are restricted to higher altitudes and the Russet-tailed Thrush replaces them at lower elevations. Both species favour dense moist forests with undergrowth, though they will venture out onto open grassy areas adjacent to forests.

Identification and behaviour

At 27-29 cm long and weighing about 100 grams, the Bassian Thrush is slightly smaller than a Grey-shrike Thrush (*Colluricincla harmonica*). The species is shy, quiet and unobtrusive, spending most of its time on the forest floor where its rich brown and scalloped upperparts help it blend in with its surroundings. The underside is cream-white and also scalloped. Both sexes have identical plumage but juveniles are more densely marked than adults. With good views, confusion with any other species in the Eurobodalla is unlikely, the only risk being with a female Blackbird (*Turdus merula*) though they are usually uniformly brown without any scalloped markings on the plumage.



Bassian Thrush

Photo: D. Bertzeletos

The song of the Bassian Thrush is very similar to that of a Blackbird, however, the notes are deeper and the phrases generally shorter in duration than that species. Only the male Bassian Thrush is believed to sing and even then only during the breeding season. When alarmed the species utters a simple “sreet” before quietly walking out of view into the undergrowth. It will only fly when spooked or pursued.

Diet and breeding

The Bassian Thrush feeds primarily on small invertebrates, particularly soft bodied prey such as earthworms and beetle larva. These they pounce upon after scanning the ground or bring up via foot stirring. Snails are also taken and the thrush typically uses a stone as an anvil to smash the shell open. Berries may also be taken when available.

It is not known if the Bassian Thrush forms a life-long pair bond. In the colder parts of its range, the males set up territory in the warmer months and sing to attract a female. Once paired, both birds will build a moss and lichen nest anywhere from ground level to 15 metres up in a tree. The female lays a clutch of two to three eggs which take two weeks to hatch. Chicks are then fed for another two weeks in the nest before they leave it. They will then spend a brief amount of time with their parents before becoming independent. The species is probably sedentary, although the presence of individuals at lower altitudes where it does not breed probably indicates that birds may leave territories at higher latitudes during the colder months.

Conservation status and distribution in the Eurobodalla

Though the population of the species appears to be in decline, it is not at present considered to be threatened and is listed as of 'Least Concern' by conservation agencies. In the Eurobodalla the species is thought to be primarily an uncommon winter visitor to coastal sites, though it may breed in the adjacent hills. Sporadic breeding may also occur on the coast but, due to the secretive nature of the species, this may go unnoticed. Dimitris Bertzeletos

What's coming up.....

IMPORTANT REMINDER

At the AGM in May, it was decided that later start times for Saturday field meetings and earlier start times for Sunday field meetings would be trialled in October and November and feedback would be sought from those who attended. Please note that Sunday meeting in October will begin at 8.30am and the Saturday meeting in November at 3pm.

Saturday October 8, 2pm. Barlings Swamp and Bevan Road. Meet at the corner of George Bass Drive and Bevan Road, next to Barlings Swamp. The swamp is home to a number of duck and waterfowl species, Swamp Harrier. The walk along Bevan Rd: Mistletoebird, various thornbills.

Sunday October 23, 8.30am. Comerang. Meet opposite the Bodalla Police Station. Julie and Peter Collett will lead a walk on their farm next to the Tuross River. Rufous Songlark, Stubble Quail, White-winged Triller, Whistling Kite, Brown Falcon, various duck species.

Saturday November 12, 3pm. Coila Creek Road. Meet at the corner of the Princes Hwy and Coila Creek Road, just south of the Coila Creek service station. The walk is along the road with farmland and patches of bush. White-throated Gerygone, Scarlet and Brown-headed Honeyeaters, Jacky Winter, Rufous Songlark.

Sunday November 27, 9am. Waders: check the Field Meetings page of the ENHS website or call David, Julie or Mandy for the venue after November 23. The venue for this walk depends on wader activity, weather and water levels in the estuaries. If cancelled, an alternative walk will be proposed.

The committee will meet in November to prepare the field meeting program for 2017 so if there is a walk that you would like to do, please let one of the committee members know.

All members are encouraged to contribute to the newsletter. Submissions for the Spring edition would be appreciated before mid November.

Please email to editor@enhs.org.au

Out of Shire Trip 2016

Booderee, Lake Wollumboola and Nowra area

4-8 November (extended to 11th for those able to stay longer)

This area boasts unspoilt coastline and hinterland habitats for over 350 bird species. It is an easy drive from the Eurobodalla area that takes from one to two and a half hours. There is a variety of accommodation available in the area. Most of the walks are easy. We will be visiting 3 main areas:



Eastern Bristlebird

Photo: S. Benjamin

- Booderee National Park and the surrounding areas of Vincentia and Erowal Bay which offer opportunities for the Eastern Bristlebird, Ground Parrot and Southern Emu-wren
- Coastline areas of Culburra and Comerong Island with Lake Wollumboola can host a diversity of seasonal migratory waders as well as a wide range of resident birds
- Nowra itself offers 3-4 walks in eucalypt forest with shrubland, sandstone cliffs and rainforested areas.

Please contact Lyn (0408 183 510 or at lynburden60@gmail.com) to express interest in coming or if you would like some additional information. An itinerary has been posted on the Field Meeting page of the Website. If you would like to visit for the day, let me know and we can plan accordingly.

Looking back over winter

All in all, we've had a very strange winter on the south coast of NSW. Autumn was very warm and dry and it seemed as if winter arrived abruptly. We had a very wet start to winter with above average rain throughout the shire in June. This filled our lakes, swamps and dams and seeing large groups of waterbirds was made more difficult as the birds had lots of water to utilise. The rain came too late for the buds of the Spotted Gum and the expected big flowering event did not transpire and, consequently, the large groups of Swift Parrots did not arrive. There were also much smaller groups of Little and Musk Lorikeets and Yellow-faced Honeyeater in the shire over winter.



Black-browed Albatross Photo: D Bertzeletos

Some interesting records included another winter sighting of the Noisy Pitta, which was seen at Blackfellow's Point in July. This species lives in the lower reaches of Gulaga and is seen much closer to the coast in winter. In 2014, there were at least 3 birds at Wallaga Lake in July and at Gulaga in December. A Red-kneed Dotterel was seen at Long Swamp near Bermagui at the field meeting in August and Fairy Martins were seen at Wallaga Lake. Large flocks of Topknot Pigeon were seen at Bermagui State Forest, Bingie and Pedro Swamp.

Wasp Head, off Murramarang National Park at South Durras is a great place to visit when the southerlies are blowing. In July, Dimitris reported four species of Albatross, Black-browed, Shy, Yellow-nosed and Buller's, as well as a Fairy Prion, Fluttering Shearwater, Eastern Curlew and 14 Sooty Oystercatcher, some of which were displaying.

Towards the end of winter, nesting began, with Common Bronzewing, Masked Lapwing, Australian Magpie and Laughing Kookaburra all starting their breeding season.

The rain in June encouraged the emergence of a number of species of Ghost Moth, and in July two Monarch butterfly were observed along the Moruya River. Julie Morgan

STICK INSECTS: they just stick around

A week or so ago, I noticed this very large stick-looking thing on a small shrub in my home garden. On closer inspection, it was not a 'thing' at all, but an insect, pale brown in colour and about 25cm in length, with really long, thin legs, just hanging on the bush.

I thought it was probably a stick insect, so looked it up on the Internet and in some books. I found that I was correct. Stick insects belong to the invertebrate *Phasmatodea* group. Phasmids should not be confused with Mantids, or praying mantises; these are predators with long spiny front legs, held folded and ready to strike and grasp prey. Phasmids are slow moving, rather unexciting, but interesting, solitary leaf eaters, relying on their cryptic colouring and similarity to bits of vegetation debris, to avoid predators. Should they lose a leg, or part thereof to a predator, they have the ability – common in insects – to grow another appendage.

There are about 150 species of stick insect in Australia, but only three species are considered pests. Mine is commonly called a Titan stick insect, scientific name *Acrophylla titan*. These, like the one I saw, can be up to 25cm long, but most species are somewhat smaller. The females are generally larger than the males, but the males fly more confidently. Stick insects spend much time just sticking around, almost motionless, without doing very much at all, in leafy plants. Sometimes they sway and rock (goodness knows what for), and their movements are generally slow and clumsy.



Titan Stick Insect

Photo: J. Liney

Even in important tasks like egg-laying, the female doesn't expend much energy. She lays one egg at a time, just dropping, or flicking, them on to the ground. The eggs look rather like seeds, but under a microscope it can be seen that

the hard shell (depending on the species) has an amazing array of textures and ornamentation. Some are shaped like little urns, with a shaped lid, or capitulum and are rich in fats. Seed patterns are true to species, and are used as diagnostic features. Ants often carry eggs with a capitulum into their nests, where they eat the nutritious lid. This helps to disperse the eggs away from the parent's food source, and reduces the rate of parasitism from a minute species of wasp.

Incubation times vary enormously – some species hatch within a few weeks, others remain dormant for years. The time taken from egg to adult also varies, dependent on food availability and temperature; the warmer the weather, the shorter the time. Once the insect hatches it goes through several moulting stages. It hangs in an inverted position from an elevated support while shedding the outdated skin that contains proteins. After each moult is completed, the insect will eat the shed skin. The shedding process is called ecdysis, and the shed skin, exuvia.

Later I saw a smaller one on another bush, and later still a very small one (about 3cm long) on a window flyscreen. While I am not overly fascinated by insects, some of them have such unusual and, to us, peculiar, habits and life cycles that it is well worth knowing about them. Jenny Liney

REFERENCES

The Australian Museum Website.

BROCK, R.D. and Hasenpusch, J.W., The Complete Field Guide to the Stock and Leaf Insects of Australia, 2012.

CSIRO, The Insects of Australia, 1970.

Wallaga Lake Field Meeting, August 2016

A group of 14 members met at the Wallaga Lake Bridge carpark on a fine winter's morning, with the purpose of exploring several sites around Wallaga Lake. The lake is the boundary between Eurobodalla and Bega Valley Shires. So much of the day's exploring was outside of our shire; but it is always rewarding to travel a little further afield.

The mid-tide was helpful for us at this first site, because the sand spits were above the waterline and many shorebirds and waders were resting or feeding. The highlights here were a single Whimbrel, four Eastern Curlews, eight Pied Oystercatchers and one Bar-tailed Godwit. The often-seen Caspian Tern was absent today, but all of our four cormorants were present, along with a number of swans, gulls and terns.

Moving further south, we drove to the carpark in Wallaga Street from where we would normally have made our way along the boardwalk to Murunna Point. This was the site for the Noisy Pitta sightings of two years ago. However, the boardwalk was destroyed in the most recent severe weather event, so we were restricted to observing the birds in the mouth of the lake. Here, we saw another pair of Pied Oystercatchers, as well as some Little Egrets in breeding plumage.

Our next stop was at Long Swamp, which, being freshwater, offers a different suite of waterbirds. The resident pair of Musk Duck were in their usual spot, as were a number of Grebes, both Australasian and Hoary-headed. The nearby low coastal bush gave us opportunities to see several honeyeaters and fairy-wrens. Another highlight was the sight of a very active pod of dolphins, which were no doubt feeding on a large school of fish, which they were sharing with a big flock of very large seabirds including gannets and albatross. Unfortunately, we were not able to identify which species of albatross.



Little Egret

Photo: G. McVeigh

Our final site for the day was the picnic area in the forest off the Bermagui-Cobargo Road. There are two patches of rainforest here, as well as access to the southern-most section of Wallaga Lake. There are picnic facilities available, so this pleasant shady area had been chosen as our lunch spot. The main rainforest track, Lilly Pilly Loop, has been greatly improved by Forests NSW since I visited the area to do the reconnaissance, and we were able to walk deeper into the forest. We were rewarded with the sight of a large group of Topknot Pigeons, which were feeding on the Lilly Pilly fruit. As they flew away, I was able to count at least 25. It was great to see such a large group of this fairly unusual bird. During the summer months, I have seen Rufous Fantail and Black-faced Monarch in this forest, so a return visit later in the year is on my calendar.



The species count for the day was 70, a very satisfactory number but not surprising, given the variety of habitats that we explored. I believe that a very good day was had by all. Mandy Anderson

Lilly Pilly Loop

Photo: G. McVeigh

Boronias: fragrant and colourful

Spring is usually welcomed by most people (except maybe hayfever sufferers) for many reasons, including the burst of colour and fragrance as many plants come into flower. The genus *Boronia* is one of the most fragrant Australian plant groups. There are 95 species of *Boronia* found in Australia, all are endemic except for one species found in New Caledonia. The majority occur in WA, and approximately 12 are found in the Eurobodalla. *Boronia*, along with other common Australian plants such as *Crowea*, *Correa*, *Zieria*, *Philotheca* and *Leionema*, belong to the Rutaceae family. This family also includes the genus *Citrus*, which originated in the Northern Hemisphere and is now grown commercially in most parts of the world. The most significant characteristic of the Rutaceae is the presence of essential oils in the leaves and flowers. By holding a leaf up to the light you will see translucent dots which are the oil glands. Crushing a leaf unleashes a scent which, depending on the species, may be pleasant or unpleasant. These oils reduce water loss from the leaves, some repel insects and others are toxic to grazing animals. Worldwide, the family consists of 150 genera and 1800 species; Australia has 40 genera and 320 species, most of which are endemic.

Boronias generally grow in open forests and woodlands, rarely in rainforests or arid areas. Their root system is not vigorous and needs dappled shade for protection. For this reason they are usually found growing amongst other plants or in areas with ground cover of logs or boulders. They are usually small shrubs with opposite and aromatic leaves. Flowers are conspicuous for their colour, fragrance and abundant nectar. The flowers have 4 petals and 8 stamens, and are pollinated by insects. The fruit is a dry capsule which splits explosively to release the seeds. Another genus *Zieria* also has 4 petals but only 4 stamens.

Species to look out for when exploring Eurobodalla bushlands include:

Dwarf Boronia *Boronia polygalifolia* - This species grows to only 50cm high and prefers rocky slopes and open forests. Leaves are glossy dark green, very narrow (1-6 mm) and up to 15mm long. They are either sessile (attached directly to the stem) or on 1mm petioles. Flowers are usually solitary and in the leaf axils. Petals are reddish or pale pink and 4-6 mm long. Flowering period is usually between September and January.

Sticky Boronia *Boronia anemonifolia* - This species is an erect shrub to 2 m high with a strong odour of turpentine. It grows on the coast and ranges in heath, woodland and dry sclerophyll forest, usually among rocks. Leaves are usually divided into 3 leaflets, each less than 2mm wide and 3-9mm long. The petiole is usually 2-10mm long. One to three flowers form in the leaf axils, with petals varying from white to bright pink and are 4-6mm long. The flowering period is between August and April.

Small-leaved Boronia *Boronia microphylla* - This is a small shrub to one metre, usually growing in moist heath, dry sclerophyll forest and protected areas such as sandstone crevices. Leaves are pinnate with 5-15 leaflets. These are dark, glossy green, spoon shaped, 3-8mm long and 1-4mm wide. Flowers are in clusters of 2-4 in upper axils, petals are bright pink to purple and 5-8mm long. Flowering period is October to February.



Dwarf Boronia



Sticky Boronia



Small-leaved Boronia

Boronias have a reputation for being difficult to grow and maintain in the home garden. The problem is usually their shallow root system which needs to be protected from high temperatures. This can be achieved by growing boronias amongst other plants which will provide dappled shade, or by mulching, especially with pebbles. Soil needs to be well drained, as waterlogged soil is likely to result in root and collar rot. Pruning after flowering helps to promote bushy growth and extend the life of the plants.

Another member of the Rutaceae family, Wax Flower (*Philotheca myoporoides*), formerly *Eriostermon myoporoides* is one of the most frequently grown Australian plants due to its hardiness and tolerance of a wide range of growing conditions. The commonly grown South African Diosma is also a member of the Rutaceae family.

Many members of the Rutaceae family are cultivated as ornamental garden plants, used in the cut flower trade and for commercial oil production. One of the most important is the Western Australian species Brown Boronia (*Boronia megastigma*), the oil of which is added to perfumes for its very intense and attractive aroma and long-lasting properties. Unfortunately, this species is difficult to grow in the eastern states. Timber is obtained from some rainforest species such as Crows Ash (*Flindersia australis*), and Kerosenewood (*Halfordia kendack*). This timber is cream to yellow, and is hard and resistant to insect and fungal attack. White Aspen (*Acronychia oblongifolia*), a coastal species found from southern Queensland to NSW and Victoria, was an important plant for indigenous people. The fruit is edible; unripe fruit was used to treat internal infections and the inner bark provided fibre for making string and rope. Fran Anderson



ENHS members have many stories to tell about their observations of nature. 'My Patch' is a forum where these stories can be shared with others and will be published both in the newsletter and on the website. Photos are welcome. Please send your contributions to mypatch@enhs.org.au

Logo design by Trevor King

Caring and sharing in the bird world



Bush Stone-curlew

Photo: M. Anderson

On a recent visit to Bega, I stopped at Kiss's lagoon to see what birdlife might be around. Since the local council's drastic culling of the willows from the lagoon, there are far fewer species there than before – no kingfishers, Restless Flycatchers or small birds such as thornbills. However, there are still many coots, ducks and swamphens and other waterfowl. On this particular day, I watched as a man arrived with his small grandson to throw bread to the birds. There was a group of Purple Swamphens, including several chicks, standing near the water's edge. As the bread was thrown by the little boy, the adult swamphens left their young and approached the two people. Collecting pieces of bread in their

beaks, they then returned to where the chicks were waiting. Standing on one leg, and holding the bread in the other claw, they offered the bread to the chicks, who devoured it eagerly.

Still in the Bega Valley Shire, I visited the new enterprise known as On the Perch, a bird 'zoo' and bird-breeding facility at Kalaru, set up by Steve Sass and family. There is a series of aviaries in which one can sit and observe many beautiful birds at very close quarters. Many of the species are non-Australian, such as those in the African and Asian aviaries, but the majority of species are Australian birds. Last summer, the pair of Bush Stone-curlews was eagerly watched by On the Perch staff, hoping to see a successful mating. I visited one afternoon during the courting period, and watched as visitors threw mealworms for the curlews to eat. I was delighted to see one of the birds gently and repeatedly picking up mealworms in its bill and offering them to the other bird. I asked Steve whether this was the female being submissive, or the male courting the female's favour. He explained that this was the curlew equivalent of bringing roses. The male was sacrificing a favourite food to win the female's heart. He was in luck. Happily, the pair mated and successfully raised a pair of chicks. It is wonderful to hear their calls on a visit to On the Perch – so evocative of the night calls in the western and northern parts of Australia's outback. Mandy Anderson

Firebrick Sea Star

Whilst walking along Rosedale beach near the lagoon on 21 August, we spotted a sea star at the water's edge being brought in by the tide. We scooped it out for a better look and were amazed at the size and colours of this beautiful sea star. Unfortunately, it appeared dead as it did not move at all, but my husband placed it in a convenient rock pool once I had a couple of pictures.

Graham J Edgar's book, *Australian Marine Life; the Plants and Animals of Temperate Waters* (second edition) provided the answers to my questions.

Name: *Asterodiscides Truncatus* (a type of Firebrick sea star)

Usually found by divers at depths of 14-800m and spread around the continent from Eucla, WA, to Solitary Island, NSW and north eastern Tasmania. The Internet had lots of photos of them and also a dive site showing these sea stars at Ulladulla and Batemans Bay a few years ago.

I found it interesting that sea stars have no brain or heart, they have a mouth in the centre of the body, some eat plants, most scavenge and some are predatory. Each arm has a digestive system and gonads and arms can number from 5 to 25. Helen Ransom



Photos: H. Ransom

Another Lurker? at Lilli Pilli

Unlike the Lyrebird this one is unwelcome. We have observed some evidence of what may be Psittacosis disease at Dunfellin. If you feed wild birds at your patch you may want to be alert to the problem.

Psittacosis is a viral disease which spreads between some birds, parrots in particular. It has been recorded as being transmissible between birds and to humans. Notable bird symptoms seen in our patch include lethargy

of some non males with one progressing to death and extensive blackening of the lower mandible of adult male King Parrots. Females and immatures may also have small black traces which can extend to the upper mandible. While some blackened mandibles can easily be overlooked another symptom is quite notable. Some birds develop obvious light coloured patches of various sizes which disfigure their green backs. These may be directly caused by the disease or possibly be due to accelerated moulting.

We will be observing our patch closely and hope to hear that others doing the same have avoided any infection signs. I & A Grant

Highlights from ENHS records - Winter 2016

| Avian species | Number | Place | Observer | Comments |
|------------------------|------------------|---|------------------|---|
| Stubble Quail | Up to 10 | Com | JC | |
| Musk Duck | 1, 2 | Jemisons Pt/ Long Swamp | MA/FM | |
| Black Swan | More than 200 | MHS | JM | In July and August. 4 cygnets in MYA in August (FM) |
| Australian Shelduck | 2 | Com | JC | In August |
| Pink-eared Duck | 60 | Com | JC | In June/July |
| Australian Shoveler | 20 | Com | JC | In June/July |
| Hardhead | 5 | Com | JC | June |
| Hoary-headed Grebe | 8, 5 | Com/MO | JC/NM | |
| White-headed Pigeon | 15, 12 | MKS/Pedro/BI | SMG/JS/DO | Nest building in MYA in August (FM) |
| Brown Cuckoo-Dove | 7, 20 | Lilli Pilli/MKS | IAG/SMG | |
| Common Bronzewing | 10 to 20 | MKS | SMG | Breeding in July |
| Peaceful Dove | Up to 4 | Com | JC | |
| Bar-shouldered Dove | Call | Cullendulla Ck | FM | |
| Topknot Pigeon | 30, 20, 25 | PS/Bingie/BI SF | JM/AM/FM | |
| Tawny Frogmouth | 2, 1 | Pedro/TS/MO | JS/JH/NM | |
| Aust Owllet-nightjar | 1 | Com | JC | August |
| Black-browed Albatross | 20 | Wasp Head | DB | |
| Shy Albatross | 10 | Wasp Head | DB | |
| Yellow-nosed Albatross | 1 | Wasp Head | DB | |
| Buller's Albatross | 1 | Wasp Head | DB | |
| Fairy Prion | 1 | Wasp Head | DB | |
| Fluttering Shearwater | 1 | Wasp Head | DB | |
| Shearwater sp | | WL | FM | |
| Australasian Gannet | 20, 12 | MB/BP | MA/FM | Including juveniles |
| Australasian Darter | 1 | Com | JC | |
| Great Cormorant | 55 | Bergalia | DHK | Overflying in July |
| Pied Cormorant | 2 | MYA/WL | FM | |
| White-necked Heron | Up to 3 | MYA/Com | JM/JC | |
| Intermediate Egret | 1 | Com | JC | |
| Cattle Egret | Up to 150, 20 | MYA/ Com | JL/ JC | |
| Striated Heron | 1 | MYA | JC/JM | On Ryans Creek among the mangroves |
| Little Egret | Up to 6 | MB/WL | MA/FM | |
| Eastern Reef Egret | 1 to 2 | Wasp Head/ Cullendulla Ck/ Broulee Is/ MO/MB | DB/DHK/ MA/FM | |
| Straw-necked Ibis | More than 250 | Trunketabella | MA | |
| Royal Spoonbill | 26, 22 | NA/MB/Com | DHK/MA/JC | |
| Square-tailed Kite | 1 | MKS/Broulee/ PS | SMG/GLM/ JM | First return to PS August 13 th |

| | | | | |
|------------------------------|--------------------|---------------------------------------|--------------------------|--|
| White-bellied Sea-Eagle | 4 | MO/MB | NM/MA | Immature at MB in August. |
| Whistling Kite | 2 | Com | JC | Nest building in July |
| Collared Sparrowhawk | 1 | BP | FM | |
| Wedge-tailed Eagle | 2 | MKS/MB/ Coolgolite | SMG/MA/D O | |
| Australian Hobby | 1 | TS/Com | JH/JC | Chasing honeyeaters along Nelson Pde at TS. |
| Peregrine Falcon | 4 | PS | JM | In a territorial display over the house in July. Calling and swooping. |
| Buff-banded Rail | 1, 2 | Mogo/TS | MF/JH | |
| Aust Pied Oystercatcher | 5, 6 | Cullendulla Ck /MB | FM/MA | |
| Sooty Oystercatcher | 14, 11 | Wasp Head/MO | DB/DHK | Displaying at Wasp Head in July |
| Black-winged Stilt | 6 | Com | JC | |
| Red-capped Plover | 3 | DS | J Coffey | |
| Double-banded Plover | 6 | WL | MA | July |
| Black-fronted Dotterel | 6 | Com | JC | |
| Hooded Plover | 2 | MB | MA | Pair seen near Pooles Beach. One flagged YO, our male from last year. |
| Red-kneed Dotterel | 1 | Long Swamp | FM | |
| Masked Lapwing | 50 | Com | JC | Nesting in MYA in August (FM) |
| Bar-tailed Godwit | 45 | NA | MA | |
| Eastern Curlew | 2, 4 | Wasp Head/WL | DB/FM | Heading south at Wasp Head |
| Caspian Tern | 1 or 2 | NA/MB/WL | MA | |
| White-fronted Tern | 2, 1 | Wasp Head/MO | DB/DHK/ NM | |
| Crested Tern | 150 | WL | FM | |
| Glossy Black Cockatoo | 4, 3 | Bodalla/MKS/ PS/Pedro/ Bergalia | MA/SMG/ JM/JS/ DHK | |
| Yellow-tailed Black Cockatoo | More than 30,16 | MB/Broulee | MA/GLM | |
| Gang-Gang Cockatoo | 10 | MKS | SMG | |
| Little Corella | More than 200 | MYA | JL | |
| Rainbow Lorikeet | 120 | Broulee | GLM | |
| Musk Lorikeet | 25, 20 | MB/MYA | MA/FM | |
| Little Lorikeet | 10, 20 | Malua Bay/ MYA | MW/FM | |
| Fan-tailed Cuckoo | 1 or 2 | MKS/Com/WL | SMG/JC/JM | |
| Powerful Owl | 1 or 2 | PS/Pedro/CO/ MB | JM/JS/S Doyle/ORN | |
| Barking Owl | 2 | Pedro | JS | |
| Eastern Barn Owl | 1 | Pedro/Com | JS/JC | |
| Azure Kingfisher | 1 | Bumbo Ck/Com | AM/JM/JC | |
| Sacred Kingfisher | 1 | Mullimburra Pt | NM | After a big storm in July |
| Noisy Pitta | 1 | Blackfellow's Pt | ORN | Adjacent to the cleared area at the campground, in banksia and pittosporum vegetation. |
| Superb Lyrebird | 6 | Bumbo Rd | FM | Male and female sighted |
| Satin Bowerbird | Up to 4 | TS | JH | Bower in garden |
| Variegated Fairy-wren | 20 | PS | JM | |
| Pilotbird | Call | NA | MA | Ringlands Rainforest |
| Yellow Thornbill | 20 | Cullendulla Ck | FM | |
| Striated Pardalote | Calls | MYA | JC/JM/FM | In July/August. |
| Yellow-faced | 50 | Bimbimbee | AM/JM | On Spotted Gum blossom |

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|-----------------------------|------------|-----------------------------|------------------------|---|
| Honeyeater | | | | |
| White-eared Honeyeater | 1 to 5 | Surfside/MKS/PS/Bergalia/MO | R Soroka/SMG/JM/DHK/NM | |
| Yellow-tufted Honeyeater | 1 | Surfside | R Soroka | In June/July |
| Fuscous Honeyeater | 20 | Bimbimbee | AM/JM | Also at Surfside in June/July |
| Red Wattlebird | 60 | Com | JC | Moving south |
| Scarlet Honeyeater | 2, calls | MO/WL | NM/MA | |
| Crescent Honeyeater | Call | Malua Bay | MW | |
| White-cheeked Honeyeater | 1, 5 | Surfside/Bimbimbee | R Soroka/AM/JM | |
| White-naped Honeyeater | 30 | Bimbimbee/Bumbo Rd | AM/JM/FM | |
| Noisy Friarbird | Up to 20 | MKS/PS/Pedro/Com/Coolagolit | SMG/JM/JS/JC/DO | First return to Com July 29 th |
| Varied Sittella | 6 | Com | JC | |
| White-bellied Cuckoo-shrike | 1 | MYA/PS/Com | FM/JM/JC | In August |
| Crested Shrike-tit | 2 | Bimbimbee | AM/JM | |
| Grey Shrike-thrush | 7 | Com | JC | 2 immatures in July |
| Olive-backed Oriole | 1 or 2 | MYA/Pedro/Bergalia/MO/Com | FM/JS/DHK/NM/JC | Immature at Com in June |
| Pied Currawong | 50 | MB | MB | Similar number to last winter |
| Little Raven | 150, 30 | Com/MYA | JC/NC | Large numbers at Com in August |
| Restless Flycatcher | 2, 1 | Com/Bergalia | JC/DHK | |
| White-winged Chough | Up to 17 | Com | JC | |
| Scarlet Robin | 1 or 2 | PS/Bergalia/Bodalla | JM/DHK/MA | |
| Flame Robin | 1 | Com | JC | In August |
| Rose Robin | 4, 2 | Com/DS | JC/J Coffey | Singles at other locations |
| Golden-headed Cisticola | Calls | Com | JC | |
| Silveryeye | 30 | TS | JH | |
| Fairy Martin | | WL | FM | Flying low |
| Tree Martin | 50, 20, 10 | Com/MB/MYA | JC/MA/JL | |
| Bassian Thrush | 2 | Cullendulla Ck | FM | |
| Common Blackbird | 1 or 2 | MYA/MB | JL/MA/AC | |
| Common Myna | 6, 4 | MYA/MO | JL/NM | |
| Mistletoebird | 1 or calls | PS/Bumbo Rd | JM/FM | |
| Australian Pipit | 5, 8 | Bingie Pt/Com | DHK/JC | |
| European Goldfinch | 14, 6 | Com/MYA | JC/JM | |

| Non-avian species | Number | Place | Observer | Comments |
|--------------------------|---------------|------------------------------------|-----------------|--------------------------|
| Short-beaked Echidna | 1 | PS/MB | JM/MA | |
| Antechinus sp | 1 | Lilli Pilli | IAG | June |
| Long-nosed Bandicoot | 4 | MB | MA | June |
| Common Wombat | 1 and signs | Coolagolite | DO | New holes at Com in July |
| Yellow-bellied Glider | 1 | Mossy Pt | HR | |
| Sugar Glider | 1 or 2 | Mossy Pt/ PS/Pedro/Com/Coolagolite | HR/JM/JS/JC/DO | |
| Common Brushtail Possum | Up to 6 | Com | JC | |
| Eastern Grey Kangaroo | Up to 80 | Coolagolite | DO | |
| Red-necked Wallaby | 4, 8 | Mossy Pt/Coolagolite | HR/DO | |
| Swamp Wallaby | More than 50 | MB | MA | |

| | | | | |
|------------------------------|---|-----------------|-----------------|-----------------------------------|
| Grey-headed Flying-fox | 1 | Mossy Pt | HR | Also at Pedro |
| Black Rat | 2 | Pedro | JS | |
| Pale-flecked Garden Sunskink | 1 | MYA | JL | |
| Weasel Skink | 1 | Mossy Pt | HR | In August |
| Eastern Blue-tongue | 1 | Mossy Pt | HR | In July |
| Jacky Lizard | 1 | Mossy Pt | HR | In August |
| Diamond Python | 1 | PS/MB | JM/MA | Wintering in the pot plants at PS |
| Small-eyed Snake | 1 | PS | JM | In June |
| Red-bellied Black Snake | 1 | MB | MA | June |
| Fur Seal sp | | Wasp Head | DB | |
| Humpback Whale | 1 | Off Broulee Is | HR | August |
| Bottlenose Dolphin | | Maloneys Bch/WL | R Soroka/ FM | |

| | |
|-----------------------------------|---|
| Frogs JC/JL/JM/HR | Common Eastern Froglet, Brown Striped Frog, Haswell's Froglet; tree frogs: Eastern Sedgefrog, Jervis Bay, Keferstein's, Peron's, Verreaux's |
| Moths JC/JM/JS | Ghost, Plume, Cream Wave, Plaintain Moth, Red-spotted Delicate, Mahogany Bark, Common Antherid, Tussock, Green-blotched, Variable Cutworm |
| Butterflies JC/JL/JM/DO | Black Jezebel, Spotted Jezebel, Cabbage White, Meadow Argus, Painted Lady, Yellow Admiral, Monarch, Common Grass Blue |
| Beetles JC | Click. Ladybirds: Striped, 26 Spotted |
| Other JC/JM | Orange Caterpillar Parasite Wasp |
| Spiders JC/JL/JM/FM | Leaf-curling, Red Back, Daddy Long Legs, Black House, Water, Huntsman, Jumping, St Andrew's Cross, Two-tailed Spider |

RAINFALL (mm). **June:** 318.5 at MKS, 309.5 at MYA, 329.8 at TS, 341.5 at Com, 395.5 at Coolagolite. **July:** 44.5 at MKS, 41.5 at MYA, 52 at TS, 38.5 at Com, 86.5 at MB, 51.75 at Coolagolite. **August:** 13 at MKS, 7 at Com, 8 at MB, 9.75 at Coolagolite.

Contributors

| | | | | | |
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| MA | M Anderson, MB | SMG | S&M Guppy, MKS | HR | H Ransom, Mossy Pt |
| ABB | A&B Bellingham, Mossy Pt | JH | J&J Houghton, TS | JS | J Sagar, Pedro |
| DB | D Bertzeletos, Surfside | DHK | D&H Kay, Bergalia | BS | B Scales, Kianga |
| AC | A Christiansen, MB | JL | J&J Liney, MYA | MW | M Wilkinson, Malua Bay |
| NC | N Clark, Surf Beach | GLM | G&L McVeigh, Broulee | FM | Field Meeting |
| JC | J&P Collett, Com | NM | N Montgomery, MO | ORN | R Nipperess & O Niennattrakul MB |
| MF | M Fyfe, Broulee | JM | J Morgan, PS | | J Coffey, DS |
| IAG | I&A Grant, Lilli Pilli | DO | D Ondinea, Coolagolite | | S Doyle, Pedro |
| | | | | | |
| | | | | | |
| Places | | | | | |
| BB | Batemans Bay | ERBG | Eurobodalla Botanic Gardens | NP | National Park |
| BBWG | Batemans Bay Water Gardens | MKS | Maulbrooks Rd S, MYA | PS | Pedro Swamp |
| BI | Bermagui | MO | Meringo | PP | Potato Point |
| BP | Burrewarra Point | MYA | Moruya | SB | Surf Beach |
| Com | Comerang | MH | Moruya Heads, N&S | SF | State Forest |
| CO | Congo | MB | Mystery Bay | TS | Tuross |
| DS | Durras | NA | Narooma | WL | Wallaga Lake |

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