

## Queensland Wader Study Group Newsletter No 3                      September 1992

### Annual General Meeting

**WHERE?**            **QUEENSLAND MUSEUM AUDITORIUM (entry is via Dinosaur Garden in Grey Street)**  
**WHEN?**            **THURSDAY, SEPTEMBER 24**  
**WHAT TIME?**    **6.30 PM**  
**AGENDA:**        Election of office bearers  
                    Talk by Mr. Barry Ingram -'Artist's view on the birds on Moreton Island'  
                    Short report by Drs. Kees Hulsman and Peter Driscoll on the wader count data collected by QWSG  
                    Information about the exciting waterbird project (street theatre on a grand scale)

**\*It is important to be punctual** as the gates will be locked by the museum security soon after 6:30 pm. If the gates are locked, security can be contacted by using the wall phone to the right of the glass doors - dial 6 and ask to be let in.

### Status of QWSG

In the last newsletter, we requested opinions on whether QWSG should become affiliated with one of the existing field naturalist groups. The majority response was to join with the Queensland Ornithological Society (QOS). The provisional committee therefore approached QOS to become a special interest group within their Organisation. It was also decided that our affiliation with QOS would be reviewed after one year and if the arrangement was unsatisfactory, then we reserved the right to again become independent of QOS. Membership of QWSG will not automatically qualify for membership of QOS and vice versa. Our financial affairs will be independent, but we will be subject to the occasional audit by QOS. We will retain our own newsletter and pursue our own objectives.

### Quick note from the treasurer

There are now 73 paid up members. We have 116 people/organisations on our mailing list. Our present bank balance is \$ 5,411:86 (this includes a government grant that has to be spent in certain areas).

### National plan for shorebird conservation

The Australian Wader Studies Group (AWSG) and Doug Watkins have recently produced a draft 'National Plan for Shorebird Conservation in Australia' for the World Wide Fund of Nature. The final document will be released very soon and judging from the response already, will prove to be an invaluable management tool for government at all levels.

Population estimates for each species of shorebird in Australia are given, largely based upon the AWSG counts taken over many years of monitoring at selected sites. The literature has been thoroughly searched for information on the status of each species and sites throughout Australia have been evaluated for their importance in sustaining significant numbers of shorebirds. A state by state evaluation was made of sites of importance and this is likely to prove the most useful aspect of the document for purposes of management and preservation of habitat. The criteria for including a site as either nationally or internationally important to shorebirds were based upon the guidelines developed by the RAMSAR convention (Convention on the Conservation of Wetlands of International Importance, particularly as Waterfowl Habitat).

The report identifies 149 areas of international importance and an additional 16 areas of national importance in Australia. Forty two percent of these areas are presently not recognised formally in any way for their conservation value. The three most important areas are the south-eastern part of the Gulf of Carpentaria in Queensland and Roebuck Bay and Eighty Mile Beach in Western Australia.

The document is a concise statement of what we know and the questions that need answering. There is a clear message of the need for continued community involvement in shorebird research and specific recommendations are given as to how governments can best respond to conserve and monitor shorebirds. Australia has a pivotal role to play in conservation of birds using the South East Asian/Australasian Flyway over the coming decade.

## **RAMSAR listing for Moreton Bay - a beginning for Queensland**

By the time you receive this newsletter, the news may have broken that Moreton Bay is to be nominated as Queensland's first RAMSAR site. Bowling Green Bay is also well on the way to being nominated. Declaration of a comprehensive marine park for Moreton Bay is also imminent. Hopefully, the RAMSAR declaration is just the beginning of a process of recognition of the international importance of a variety of freshwater and marine wetlands in Queensland. It has been a long time coming and has a long way to go.

The QWSG has given advice to the Department of Environment and Heritage (DEH) on the proposed RAMSAR boundary for Moreton Bay. The Environment Branch of the Brisbane City Council has also been receptive to our views. Nevertheless, many important sites for waders and waterbirds are still not included because of their status as freehold land. Certain government bureaucracies and private landowners are still ignorant of the value of Moreton Bay as a wetland reserve and have resisted the notion of a RAMSAR site. The resulting boundary will be a compromise but at least one that offers hope for eventually wise management, of the natural attributes of Moreton Bay. An appropriate zoning plan for management of the bay is still to be devised and implemented by the Coastal Management Branch of DEH and this is probably the most crucial phase of the process that has been embarked upon. A management plan for Pumicestone Passage is at a far more advanced stage. The efforts of the QWSG in gathering data and making it available will have continuing benefits.

## **A great boost!**

The Qld Ornithological Society Inc., on behalf of the QWSG, has received \$5,500 to pursue voluntary studies on waders in Moreton Bay. The money comes from the Coastal Management Branch of DEH under a contract for 'Monitoring of Shorebirds in and around Moreton Bay' over the coming year. This will benefit everyone concerned and especially the birds of the bay. The money has already been used to purchase a good set of two-way radios (vital for cannon netting), and is intended to be used to obtain a lockable trailer to carry and protect our equipment, and on travel expenses incurred in accessing parts of the bay such as Moreton and Stradbroke Islands.

Just remember when you are doing those counts, take it seriously but have fun. If you have a claim for expenses or want to know more about the contract please contact Peter Driscoll.

## **Mirapool - a process of learning!**

Large numbers of Bar-tailed Godwit, Whimbrel and Eastern Curlew that feed on the intertidal shorelines of North Stradbroke and Moreton Islands use six principal roost sites in central Moreton Bay. Jeremy Thompson recorded details of the roost sites in 1988 for QNPWS and found that one site in particular held very large numbers of birds over summer (> 5,000 and > 11 species), especially on high spring tides when other sites are covered. At the time, this site was known as Mirapool Island, located just out from the south eastern shoreline of Moreton Island.. Since then, Mirapool has joined onto Moreton Island to form a lagoon, but is still a major roost site and is possibly one of Queensland's largest.

The QWSG and the Moreton Island Protection Committee have convinced QNPWS of the significance of this site and highlighted the fact that birds are now disturbed by people and vehicles during their period of rest at high tide, sometimes time and time again, which is presumably detrimental to their general fitness. The problem is one of managing people not wildlife and requires a well devised strategy of education and subtle coercion. QNPWS is addressing the problem and we are helping by providing material that can be used to inform people about waders and the special significance of Mirapool. We are now learning about solving a difficult problem of managing people and waders.

## **Special thanks to Moreton Island Protection Committee (MIPC)**

Several months ago when QWSG was only just beginning to find its feet, it got an amazing gift of \$500 from MIPC in appreciation of our interest in Moreton Island. Since that time, we have had two most interesting trips to Moreton Island, which were, largely made possible due to logistical help from MIPC (and field assistance from their members). We are most appreciative!

## **QWSG is not alone!**

Far from it! We are one of several state based wader study groups (NSW, Victoria, WA and now Qld). The AWSG (Australian Wader Studies Group) creates a bridge between all of us and overseas. A group called the Miranda Banders are active in New Zealand and recently (4/7/92) they recaptured 6 Red Knot's that were banded in Australia: one was banded in Moreton Bay in November 1990, three were banded in Victoria and 2 were banded in Western Australia.

If anyone wants information on the other groups, please ask. We have their newsletters and are in personal contact.

## **Earthwatch**

A small Earthwatch team will be working with QWSG in Moreton Bay between October 18<sup>th</sup> and November 2<sup>nd</sup>, 1992, when we will be in the field every day netting or monitoring birds. You can get details from Peter Driscoll if you want to participate and we could use the help. Some of the activities of the Earthwatch team are listed as part of general QWSG activities.

## **Shade Cloth**

Do you have any unused pieces of shade cloth lying in the back of your garden shed? We are after donations of shade cloth for use with cannon netting. Previously we have been using hessian to construct holding cages and to cover the birds that are trapped in the nets. Hessian has several disadvantages, such as becoming very heavy when it absorbs water and deteriorating due to microbial decomposition. On the Moreton Island trip (described later on), we experimented with using shade cloth and found that this is a very good replacement for hessian. Donations of shade cloth can be made to Peter Driscoll or Andrew Geering.

## **Report on activities day, Nudgee Field Study Centre August 8**

The day started with a BBQ lunch, followed by a talk, and then a net and holding cage repair session. The turnout was especially encouraging, with about 20 people participating, including some new members. The highlight of the day was a stimulating talk by Mark Barter, who is chairperson of the Australasian Wader Studies Group. In the following lines, a précis of his talk is given.

## **Why is counting and banding waders in Australia so important?**

by Mark Barter

In this talk, the threats facing waders in the Asian-Australasian flyway are described, and the importance of data collected by amateur groups, such as QWSG, for the conservation of waders, is discussed.

The major threats to waders in the flyway are hunting, habitat destruction and pollution. It is estimated that about 7 million waders are found in the flyway, and the number of new fledglings each year is about 15-20 % of the population. Although difficult to ascertain, it is estimated that between 0.5-1.5 million waders are hunted annually. From these approximate figures, it is evident that hunting may have a significant effect on population numbers. In Java alone, 100,000 waterbirds are caught annually, of which 60,000 are waders, and 40,000 are of the one species, the Oriental Pratincole. All Oriental Pratincoles migrate to Australia. These birds are caught in mist nets, and are sold at market food stalls. Many records of retraps of birds banded in Australia are from near Shanghai in China. Ironically, the bands are recovered from hunted birds.

Mangrove forests, which are a critical component of the wader's ecosystem, are being destroyed along most of the flyway. For example, 80% of the mangrove forests of the Philippines are gone. In south-east Asia, the trees are used for timber, and the mudflats are either converted to ponds for aquaculture, or land-filled for industrial development. On a positive note, mangroves are being replanted in some countries like Bangladesh, to counter the effects of tidal surges and because fisherman are realising the value of mangroves as fish hatcheries.

In Australia, wader study groups have been active in Victoria and Tasmania for many years, from which long term trends in population change have been obtained. Between 1983 and 1992, numbers of Red-necked Stints and Curlew Sandpipers (see Fig. 1) counted in the Mud Islands-Swan Bay area of Port Phillip Bay have been steadily declining. In the same time period the numbers of Bar-tailed Godwits have been observed to fluctuate (see Fig. 2). It is thought, that the decline in the number of small waders is because they require more 'stepping stones' along their migration route than the larger waders and are therefore more susceptible to the previously mentioned disturbances.' The number of Bar-tailed Godwits is apparently dependent on their breeding success, which is dependent on the population size of lemmings (a small arctic rodent) in their breeding area. In good years, predators such as foxes and owls feed on the Lemmings and leave the Godwit chicks alone, but if the Lemming numbers crash, then the predators turn to alternative prey such as the Godwits.

In the Hobart area, the numbers of Curlew Sandpipers and Red-necked Stints have been monitored between 1972 and 1990. Tasmania represents the terminus of the flyway. The proportion of young birds in Tasmania is higher than in Victoria. Numbers of waders reaching Tasmania is thought to be dependent on the annual level of competition between waders. The strongest birds fly the least distance and weaker competitors such as juveniles, are forced to fly further south. Changes in competition could explain the observed fluctuations in numbers of Curlew Sandpipers in the Hobart area over the years (see Fig. 3).

Wader study groups in Australia can make valuable contributions to an understanding of the ecology of waders. In Australia, we have a wide variety of migratory waders, and a large proportion of the waders in the flyway reach Australia (often 50-100% of the population). Furthermore, we have a stable population in January to February, which is ideal for counting. Wader study groups are active in Victoria, NSW, Tasmania, north-west WA and here in Queensland. In other parts of the flyway, there are no amateur groups, and research on the waders by professionals is often relegated to low priority. In Moreton Bay, Great Knot, Eastern Curlew, Bar-tailed Godwits and Grey-tailed Tattlers are common compared to further south, and we have an ideal opportunity to greatly increase the knowledge on these species. Counting can provide information on population numbers, and banding provides information on migration routes, the age structure of the birds, breeding success, and change in survival rate with time.

Finally, a warning to new groups. It is important for the QWSG to focus on data analysis so as to feed back information which can be used to devise management strategies for the conservation of the birds. It is our duty to use the data wisely to justify the stress we place on the birds when banding.

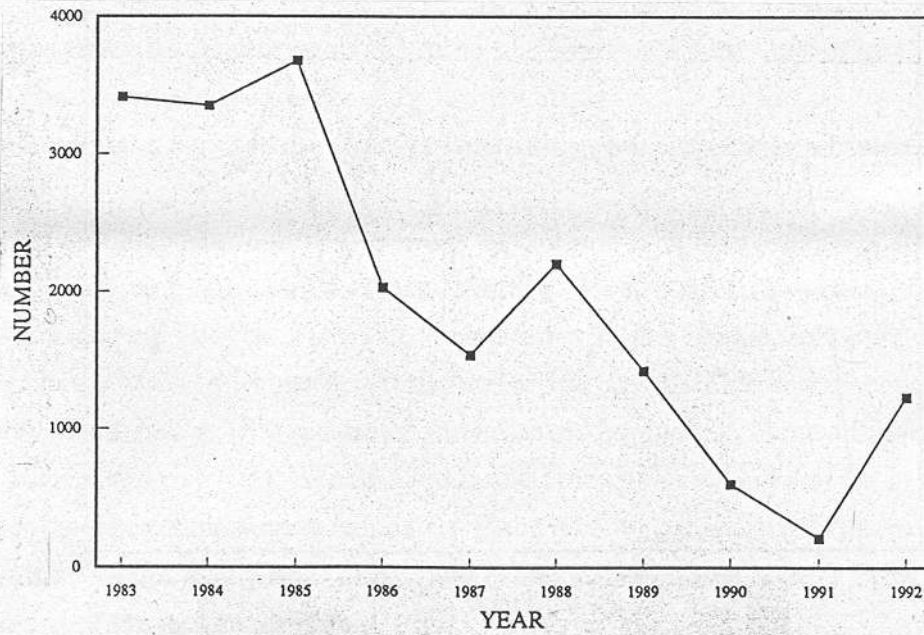


Fig. 1: Changes in the population size of Curlew Sandpipers in the Swan Bay - Mud Islands area of Victoria between 1983 and 1992. Counts were made in February.

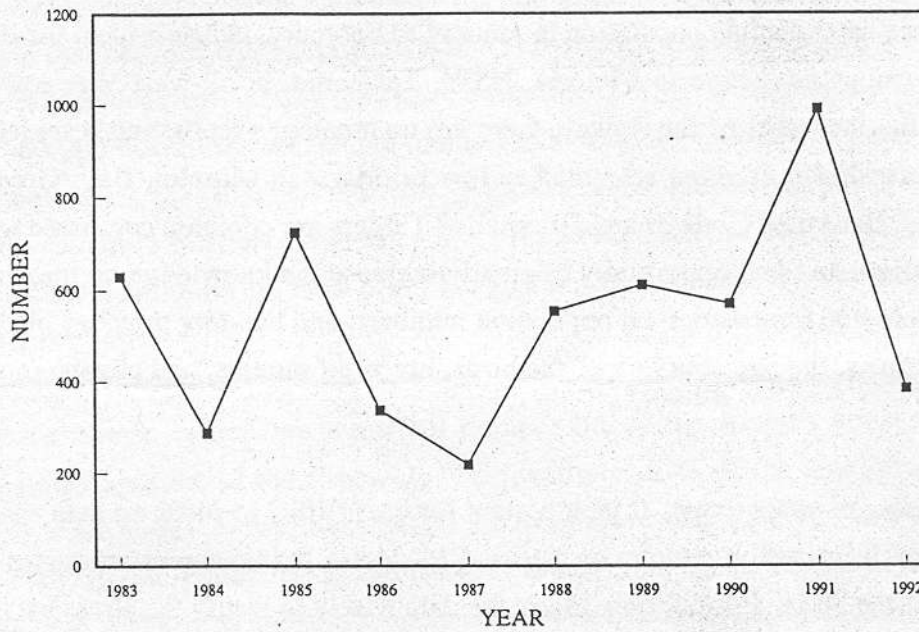


Fig. 2: Changes in the population size of Bar-tailed Godwits in the Swan Bay - Mud Islands area of Victoria between 1983 and 1992. Counts were made in February.

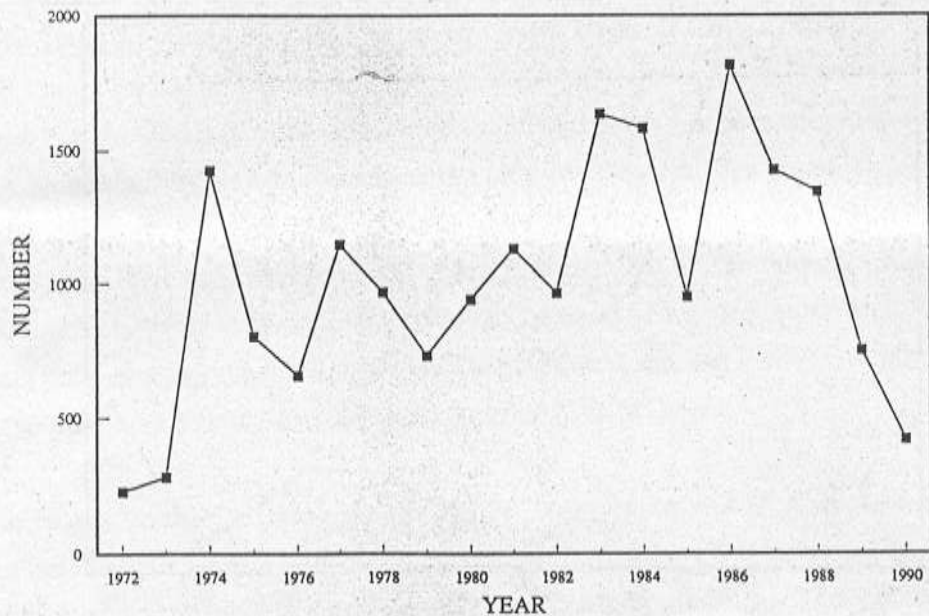


Fig. 3: Changes in the population size of Curlew Sandpipers in the Hobart area of Tasmania between 1972 and 1990. Counts were made in Summer.

## Reports on field trips

### Cabbage Tree Creek Trip (July 18)

On a very wintry day, Gary Harch, Barry Ingham, Peter Driscoll, Thomas Tomkin, Margaret Bernard and Andrew Geering went cannon netting at the mouth of Cabbage Tree Creek. Thankfully, the rain clouds cleared by about 10:00 am and we had a chance to dry. Both the large and small nets were set.

A new set of CB radios, purchased by QWSG, were used for the first time. These proved very useful (if not essential), as movements of the birds were monitored by Peter in a canoe, who was out of sight of the 'firers' in a hide.

55 Bar-tailed Godwits, 8 Great Knots and 3 Red Knots were captured in the large net. Interestingly, a large number of the Great Knots and a few of the Godwits had some breeding plumage. Sadly, we had 3 fatalities (2 Great Knots and 1 Godwit). These birds suffered from a stress syndrome called myopathy, which causes paralysis of the legs. Paralysis is due to muscle degeneration, which happens when the birds struggle in the net and lactic acid builds up. This problem will become less common when more people become experienced and we can clear the net in a faster time. We are also looking at other solutions such as blindfolds for the birds, administering drugs, and cutting the net in half so that if too many birds are in range of the net, we can selectively fire one half.

Two of the Great Knots captured were retraps. These birds were banded by QWSG at Bishop Island. These retraps were encouraging, as they might help us build a picture of the movement of birds in Moreton Bay and the effect of land filling on their roosting site at Bishop Island.

A whisper amongst Shorncliffe fisherman is that a crazed man was seen swimming across Cabbage Tree Creek at midnight on the Saturday. I can confirm this rumour to be true. No, Peter is not crazed, but yes, he can be accredited with this aquatic feat (could he secretly be training for the 1996 Olympics?). At the end of the day, the tide had reached its lowest ebb, and we found ourselves with masses of water soaked equipment, about a kilometre away from the cars across the mudflats. We decided to load the canoe up and leave it at the netting site, and Peter bravely volunteered to come back at the next high tide at 10:30 pm to collect the gear. He says he got back home at 2:30 am. On behalf of the others, thanks Peter for doing what must be one of the most undesirable jobs.

## Fisherman Island (August 1)

One of the studies that QWSG is undertaking is to try and sort out the different flocks and habitats of Pied Oystercatchers in Moreton Bay. One flock on Stradbroke Island has been leg-flagged and another flock without any leg flags has been observed on St. Helena Island. Do the Pied Oystercatchers ever migrate between the islands? Are there some that prefer the holiday lifestyle, while others prefer the working atmosphere closer to Brisbane? These are some of the questions we wish to answer.

One Saturday, after exhausting all commercial possibilities of transport (they don't seem to like the typical Peter Driscoll banding start of 5:00 am), we hired a boat and headed off to St. Helena Island. At this point, the first valuable lesson was learnt. Moreton Bay is no place to be in with anything smaller than a large speedboat or yacht. The wind had picked up and there was no way that we were able to get across to the island. After being dumped on a sandbar, we did an impromptu bird count at the mouth of the boat passage. A change of plan was needed.

We headed off to Fisherman Island to see what was there. Paydirt! A large flock of Pied Oystercatchers was flying around. Were these the St. Helena mob or the local residents? In quick time the two cannon nets were set up. One was set where the birds had previously been seen to roost, and the other was set near a large flock of Red-necked Stilts. Then a very interesting hour was spent fruitlessly trying to get the flock of Pied Oystercatchers to land somewhere near the net. That day, they preferred to do anything else. Not to worry, a group of Black-winged Stilts had landed next to net 2! What a catch this would be, as hardly anyone has been able to band significant numbers of these birds. About 2 seconds before we were going to fire, with the Stilts nicely positioned in front of the net, they suddenly decided to fly off. Apparently this is typical behaviour. The \*#g!'s. Oh well, time for plan C.

We next tried to twinkle 50-100 Pied Oystercatchers which were roosting near the net. However for some reason they too were suspicious and instead of walking in front of the net, they decided to walk closer to the shore. It was now definitely the last chance! Bang went the net, and upon inspection, we found that we had the magnificent total of 5 birds for the day. Some NZ banders who were visiting reassured us that these things do happen. On some days they haven't even been able to fire the net. Stand by for the next episode of Pied Oystercatching. Better still, join us! Thanks go to Pat, Phil, Rodney and visitors for their efforts and frustrations.

P.S. We have now been offered the use of a private yacht.

## Moreton Island trip (August 14-16)

After a recent succession of wet days for cannon netting, we finally got the weather right for this trip; we had two sunny days in the mid-twenties. Alan Gennings kindly let us use his camping facilities at Blue Lagoon (set up, for commercial use), so on Friday night, we did not have to fumble in the dark to set up tents and could immediately collapse into our -sleeping bags.

Wake-up time on Saturday was 4.15 am. Thirteen of us piled into the Landrover, contorted our bodies to fit between the netting equipment, and made the hour long trip to Reedy Point. Both nets were set on a sand spit, which became an island at high tide. All was ready by 7.45 am. During the wait for high tide, we were entertained by a pod of dolphins fishing close by. Especially exciting was a mother and calf that swam as close as a few metres from the shore. A pair of nesting Ospreys also kept a watchful eye on us.

Twinkling responsibilities were given to Phil Venables and Peter Driscoll. Phil, there is 'a job in talk-back radio waiting for you. Things were starting to look a bit grim, as the birds had settled down on a couple of sand islands about 200 metres offshore and did not look like moving. Peter was cursing under his breath that we did not have a boat. To the rescue came Phil, who hailed down a passing fisherman, and persuaded him to 'buzz' the birds on the islands. A close pass by the boat did not do the trick, but not to be discouraged, the fisherman landed on one of the islands and did a song and dance routine, and the flock of birds launched into the air and landed in our netting area. Thanks go to the anonymous fisherman, who later joined us, and was heard to say that he did not catch any fish that day but at least he caught 200 birds (his fishing mates will never believe him!).

'Fire' came from Phil, and the net hurtled over the roosting birds. About 200 birds were caught, to the greatest relief of Phil, who later admitted to some tension at giving the command, with the risk of disappointing everyone. The numbers and types of wader species banded were 142 Bar-tailed Godwits, 59 Whimbrels, 2 Eastern Curlews, 1 Red Knot and 1 Ruddy Turnstone. After a busy day recording data, we packed up at about 5:00 pm and headed home.

After a long and successful day on Saturday, we decided to have a day of relaxation on Sunday. Some of us went for a swim in either Blue Lagoon or the ocean, while others got no further than the eating area. The athletic achievement of the weekend was by Fred, who did the 16 km round trip to the lighthouse in a morning.

As seems to be becoming characteristic of QWSG field trips, there was a dose of adventure on this trip. On our return trip to the ferry, we were traversing the island in an ex-army truck and came across a steep stretch of the track with loose sand which we could not negotiate. After several attempts, and a bit of pushing, we did manage to get to the top of the hill, but then the engine cut out. We were stuck, and about 4 other 4WDs behind us were also blocked and time was running out to catch the ferry. By a stroke of luck, a bloke behind us was an auto-electrician and proceeded to attack the engine with the delicacy of a meat cleaner at the abattoirs. Off came the fuel filter, add a bit of connecting tube and presto, we were going again. Next came a ride that would have matched any at the RNA showgrounds that weekend as we raced to make the ferry. We made it with 10 minutes to spare.

A good time was had by all and the weekend was especially productive with the large catch of Whimbrels.

## **Activities**

For netting activities, please confirm with Peter Driscoll three days in advance for confirmation of time and place. In the case of weekend trips, please confirm at least 1 week in advance. For the wader counts, please ring Kees Hulsman, Ian Gynther or David Stewart.

### **Wader Counts (general monitoring)**

Saturday 26th Sept.	High of 2.21 m at 9:06 am.
Saturday 10th Oct.	High of 2.03 m at 8:28 am.
Saturday 24th Oct	High of 2.21 m at 8:00 am.
Saturday 14th Nov	High of 2.37 m at 11:59 am.
Saturday 12th Dec	High of 2.56 m at 11:04 am.

### **Cannon Netting**

Saturday 3 <sup>rd</sup> Oct.	St Helena Island - high of 1.94 in at 2:40 pm - meet at 9:30 am.
Sun 11 <sup>th</sup> Mon 12 <sup>th</sup> Oct.	South Stradbroke Island - high of 2.12 m at 9:00 am on Sunday - please enquire a week in advance - this is an untried site - we may net on either day and all depends upon getting boat access.
18 <sup>th</sup> - 31 <sup>st</sup> Oct.	During this two week period, an Earthwatch team will be helping QWSG with wader studies in the bay. Anyone interested in helping out should ring Peter Driscoll after 20 <sup>th</sup> Sept. Netting sites will include Bishop Island, Amity Point, Cabbage Tree Creek and Moreton Island. Netting is likely to be on Mondays (19 <sup>th</sup> & 26 <sup>th</sup> on the mainland) and Thursdays or Fridays on Stradbroke & Moreton Islands.
Saturday 28 <sup>th</sup> Nov.	Caloundra or Pumicestone Passage - high of 2.30 m at 11:55 am - meet at 6:30 am. Site yet to be finalised.
Fri 11 <sup>th</sup> - Wed 16 <sup>th</sup> Dec.	Trip to the Great Sandy Strait and Fraser Island

### **Wader identification day**

Saturday 17 <sup>th</sup> Oct.	High of 2.15 m at 1:00 pm. Phone, or be at Lytton high tide roost at 11:30 am.
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### **Equipment maintenance day and BBQ**

Saturday 21 <sup>st</sup> Nov.	Midday onwards for part or the whole afternoon at the Environment Centre (Nudgee Beach).
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