
*Management and monitoring of shorebirds
in the Ashley River during the 2008/09 season*

Ashley/Rakahuri Rivercare Group, Inc.

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Summary (NL has had a go at this)

Dowding, J.E.; Ledgard, N.J. 2009. *Management and monitoring of shorebirds in the Ashley River during the 2008/09 season*. Unpublished report, Ashley/Rakahuri Rivercare Group Inc., Rangiora. 22 pp.

The Ashley/Rakahuri Rivercare Group was formed in 1999. Its main goal is to protect key shorebird populations in the lower reaches of the Ashley/Rakahuri River. In 2005, the Group became an incorporated society, and in June 2007 received a 2-year grant from the Lottery Environment and Heritage Committee to assist it in carrying out its objectives. This is the fifth annual report from the Group.

The main activities undertaken by the Group in 2008/09 were:

- Advocacy and liaison with schools, special interest groups and the general public
- Maintenance of riverbed signs to alert public of bird breeding areas
- Control of mammalian predators in areas with concentrations of nesting birds
- Enhancement of public facilities in parts of the river not used by shorebirds
- A survey of bird species in the lower river in November
- Monitoring of bird breeding success

Activities were focussed on management to assist the breeding of the three most threatened species in the river, namely wrybill, black-billed gull and black-fronted tern.

A major flood in February, 2008, cleared large areas of weed-infested riverbed, and created excellent sites for bird breeding over the 2008/09 season.

Advocacy and liaison initiatives, in the form of media articles, public talks and advertising (including a screen-vista over 4 months in the local cinema) continued to raise public awareness of shorebirds in the river and of the Group's activities. Powerpoint presentations were given to four schools, a Lotteries Environment and Heritage Committee meeting, two community groups and as part of Conservation week. Two guided field tours visited the river to observe bird breeding. A successful application was made for funding to publish a childrens' book about wrybill breeding on a braided river. Continued support was given to the new BRaid group and its aims to restore indigenous ecology on all braided rivers – this included visits to Orari and Makarora rivercare groups. The Group also made submissions to, and maintained its support for, the implementation of ECan's Ashley Rakahuri Regional Park plan.

Predator trapping resulted in 30 mammals of four species being caught in 3,980 trap-nights, at a catch rate of 0.75 predators per 100 trap-nights. Hedgehogs were the most common species trapped, but the February flood caused numbers to be well down on previous years.

Enhancement of public facilities in parts of the river not used by shorebirds focussed on native vegetation planting of a riverside walkway, maintenance of the 4WD track and assistance with the selection of swimming hole sites in the summer.

High river levels disrupted the planned spring bird surveys and only one survey could be undertaken (November 23, 2008). Bird numbers were close to average, but did not include a large black-billed gull colony which arrived one week later.

Monitoring of the three key threatened species revealed a season which could be described as 'of mixed success'. Six wrybill pairs were known to nest in the study area, which was two more than in the previous year. Five reached egg-hatching stage, but only three (possibly 4) chicks were fledged. Adult mortality remains high, and this is an area of concern. A black-billed gull colony of over 300 pairs arrived in late November, probably displaced by floods on the Waimakariri river. They fledged 250 chicks from 332 nests. Around 30 pairs of black-fronted terns nested in the study area at three sites, but were only successful at one site, where

10-12 chicks were fledged. By far the most successful site was off Groyne 1, where all three of the threatened species fledged chicks.

Recommendations for future management include:

- Continue predator control, annual surveys, monitoring activities and banding, focussing on the three key threatened shorebird species
- Continue advocacy initiatives - notably in schools
- Continue full support to the 'BRAID' group
- Maintain and improve collaboration with commercial shingle extractors.
- Support the implementation of Environment Canterbury's Ashley Rakahuri Regional Park plan.

1 Introduction (NL has had a go at this)

The braided rivers of the South Island are a unique habitat of outstanding importance to endemic wildlife (Cromarty & Scott 1996, Dowding & Moore 2006). In particular, they provide breeding habitat for a range of threatened shorebird species, some of which depend largely or entirely on braided rivers for their survival. Braided rivers commonly have large areas of bare, mobile shingle, multiple channels, and variable flows (O'Donnell & Moore 1983). However their ecological values are increasingly threatened; most have been invaded by weeds and introduced mammalian predators, and are further degraded by a wide variety of human activities.

The Ashley is a medium-sized river located in North Canterbury. From the Ashley Gorge, the river flows east and enters the sea about 25 km north of Christchurch. In contrast to the larger snow-fed rivers, the Ashley is fed by rainfall from the foothills and has relatively low flow rates.

The shorebird values of the Ashley are well-recognised. Following surveys of Canterbury rivers in the 1970s, the New Zealand Wildlife Service ranked their wildlife and conservation values; the Ashley was one of five rivers given the highest possible ranking of 'Outstanding' (O'Donnell & Moore 1983). More recently, the Ashley River and estuary were also included in a list of wetland sites of international importance in New Zealand (Cromarty & Scott 1996).

In the past, the river has provided breeding habitat for significant numbers of black-fronted terns (*Sterna albobriata*) and thousands of pairs of black-billed gulls (*Larus bulleri*). Recently the number of gulls in particular has declined substantially (Dowding & Ledgard 2005). The Ashley is one of the most northerly on which wrybills (*Anarhynchus frontalis*) breed, following a southward contraction of the core range of the species over the past century (Riegen & Dowding 2003). All three of these species are endemic (occur only in New Zealand) and are threatened. The wrybill has a declining range and is classified as Nationally Vulnerable. The black-billed gull is classified nationally as in Serious Decline but internationally as Endangered, making it the world's most threatened gull species (BirdLife International 2007). Of most concern is the black-fronted tern, which is declining rapidly and is classified as Nationally Endangered, the second-highest ranking possible under the New Zealand scheme. Other shorebird species that are in lower threat categories or are not threatened also breed in the Ashley. The New Zealand threat ranking scheme has recently been revised (Townsend *et al.* 2008) and **the threat categories of all New Zealand birds are due for review in mid-2008.**

The Ashley/Rakahuri Rivercare Group (ARRG) is a community group formed in 1999 to assist with management of the lower reaches of the Ashley River. Its main aims are to protect shorebirds and their habitat in the riverbed, to monitor breeding success, and to promote these activities to the wider public. In 2005, the Group became an incorporated society. Since 2004, the ARRG has received three grants to assist it in carrying out its aims. During 2006/07, the principal sponsor was the Habitat and Protection Fund of WWF-New Zealand. In June, 2007, a

2-year grant was approved by the Lotteries Environment and Heritage Committee. The activities undertaken during the 2004 have been described in the Group's annual reports (Dowding & Ledgard 2005, 2006, 2007, 2008). Those reports described the results of bird monitoring, habitat enhancement, predator control, and advocacy, and made recommendations for future management.

This report documents the management activities and monitoring of birds that were undertaken during the 2008/09 season. Emphasis was again placed on protection of the three key shorebird species: the wrybill, black-billed gull, and black-fronted tern. An Activity Chart for 2008/09, which summarises activities by the Group, is shown in Appendix 1.

2 Study area and methods (NL has dealt with 2.1 – 2.6)

2.1 STUDY AREA

The study area consists of an 18 km stretch of the lower Ashley River, from its confluence with the Okuku River to the State Highway 1 bridge. It was described in detail in the Group's first report (Dowding & Ledgard 2005). A sketch map of the area is shown in [Figure 1 \(is this the latest version?\)](#).

2.2 HABITAT ENHANCEMENT

In previous years, Taggart Earthmoving Ltd has been contracted to remove weeds from specific sites in order to create potential bird breeding areas (see previous reports). No such work was undertaken in 2008. A very large flood (over 1100 cumecs) ([check](#)) in early February 2008, considerably widened and changed the braided component of the river, resulting in much larger weed-free areas. Another smaller flood in mid-August ([check](#)) cleared debris from the first flood.

2.3 WALKWAY CREATION AND 4WD TRACK MAINTENANCE

The planting of native species, particularly alongside the Mike Kean Walkway continued over the 2008 winter, with weed control carried out around those already established. ([Nick will find out from Chris - the number of seedlings planted?](#)) A flood in mid-August eroded a section of the Walkway, requiring considerable riparian work with heavy machinery to strengthen the bank by laying and roping together willows.

On the 4WD track, which runs along the berm area on the north bank between the end of Rossiter's Road and the Makerikeri River, signs were re-instated and maintenance was carried out where holes had become too deep or willows had fallen across the track.

2.4 PREDATOR CONTROL

A range of traps was used to target mammalian predators (mainly cats, mustelids and hedgehogs). They included cage traps, Bushby tunnel traps, Timms traps, PossumMaster traps and DOC 200 and 250 traps. Traps were first set on 7 September at sites with a history of use by nesting birds. As the three key bird species occupied territories, traps were added or moved between sites. Traps were baited with a range of baits, usually salted rabbit or hen eggs, and checked once or twice a week. During the season, a total of 670 km was traveled by five trappers visiting thirty-two traps at eleven sites. The last traps were removed on January 30, 2009.

Figure 1 Sketch map of the study area in the lower Ashley River. Significant bird localities are shown with solid circles and are labelled with territory names.

2.5 MONITORING

Monitoring of wrybills, black-billed gulls, and black-fronted terns was carried out as described in previous reports (Dowding & Ledgard 2005, 2006, 2007), and began this season in September. Most monitoring effort was concentrated in the core study area between the Aerodrome and Marchmont. For the first time for many seasons, none of the rare and endangered species bred at Dalziels, about 2 kilometers above the Aerodrome. Breeding success (productivity) for each of these species was recorded as the average number of chicks fledged per pair within the study area.

Every year, two bird surveys are attempted in the spring. The October survey was cancelled due to high river flows, with the second survey being carried out on November 22, when fifteen people took part, divided into four groups.

2.6 MEETINGS

During the 2008/09 season, the Group held meetings in the Waimakariri District Council's meeting rooms, Rangiora, on June 4, August 13, October 8 (AGM) and November 26, and February 18. Average attendance was 12 members.

3 Results

3.1 HABITAT ENHANCEMENT (NL HAS DEALT WITH THIS)

Walkway creation and 4WD track

The Mike Kean Walkway, which was officially opened on 23 April 2007, is now accepted by the public, and getting increasing use. Hence, it is now achieving its objective of providing a walking and dog-exercise area in sight of the riverbed, but far enough from it to prevent disturbance to the birds.

The 4WD track continues to get reasonable use, acting as a good alternative to driving in the riverbed itself. However, its rugged contours are only attractive to more adventurous drivers.

Weed clearance

No areas were cleared of weeds by the Group during 2008, due to good floods prior to the season – see section 2.2 above. These floods not only maintained the weed-free status of areas cleared previously by commercial shingle removal (usually favoured by nesting birds), but also cleared weeds from large areas of the berm which were previously heavily infested. Consequently, the 2008-09 breeding season started with more good bird-nesting habitat available than had been the case for many years.

3.2 PREDATOR CONTROL (NL HAS LOOKED AT THIS AND UPDATED TABLE 1)

In total, 30 potential predators were trapped in 3,980 trap-nights. Predators trapped consisted of 17 hedgehogs, 7 cats, 5 stoats and 1 weasel. Cat and stoat numbers were up from the previous season (4 and 3 respectively), but hedgehog numbers were less than half (39), probably due to the pre-season floods having swept many away. Details of trapping periods, trap-nights and captures at each site are shown in Table 1.

Table 1 Results of predator trapping in the Ashley River, 2007/08 season. Locations are shown in Figure 1. Trap-nights are not corrected for sprung/occupied traps.

Location	Trapping period	Trap-nights	Captures					
			Cat	Stoat	Weasel	Hedgehog	Rat	Mouse
Aerodrome south bank	7/09/08 – 28/01/09	532	2	0	0	6	0	0
Racecourse	29/10/08 – 30/01/09	372	1	0	0	0	0	0

Big Island	07/09/08 – 30/01/09	695	2	0	1	5	0	0
Groyne 1	26/09/08 – 28/01/09	750	0	0	0	2	0	0
S. Railway	17/09/08 – 28/01/09	532	0	1	0	3	0	0
Golf Links	01/10/08 – 31/12/08	929	2	4	0	1	0	0
Marchmont	17/10/08 – 10/12/08	170	0	0	0	0	0	0
Totals		3980	7	5	1	17	0	0

Trapping rates varied many fold between sites. **Comment on captures/trap-nights.**

3.3 ADVOCACY **(NL HAS DEALT WITH THIS)**

During the 2008/09 breeding season, the public were made aware of the Group's activities in the riverbed by:

- Three articles in the local *Northern Outlook* newspaper (June 18, Sept 13, Dec 20, 2008).
- One advertisement in *Northern Outlook* – part of Ashley River promotion (Sept 3).
- An article in Environment Canterbury's *Living Here* in March 2009.
- A nightly Screenvista presentation for 4 months in the Rangiora cinema (August-November 2008).
- Talks/visits to special interest groups, usually with PowerPoint presentation included:
 - Rangiora Borough, Ashgrove, St Martins and Southbrook schools (Aug 26, Sept 5, Oct 14 and Nov 4, 2008 respectively)
 - Public meeting as part of Conservation week plus river visit (Sept 10-14, 2008),
 - Central Otago Forest & Bird, Makarora, plus river visit (Dec 6, 2008)
 - Orari River Group, plus river visit (March 3-4, 2009)
- Field visit to Ashley River with ECan group (Aug 20, 2008)
- * Lotteries Environment and Heritage Committee meeting in Canterbury Museum, Christchurch (Mar 6, 2009)
- * Field visits for public to see breeding birds in Ashley riverbed (Jan 14 & 21, 2009)
- * Customised Corflute signs placed in managed riverbed areas (Sept 08 – Jan 09, 2008).

The Group has also been actively involved in the formation and running of BRaid, a group which aims to improve the ecological welfare of all braided rivers in Canterbury. Members of the ARRG are currently Chairman and Vice-Chairman. BRaid meetings were held on July 11, Aug 29, Oct 31, Dec 12 (2008), and Feb 13, May 22, May 29 and June 3 (2009).

During 2008, the Group remained involved in planning for the creation of the Ashley Rakahuri Regional Park, assisted with an ECan field inspection (Aug 20, 2008) and sent in submissions to the plan.

The Group was part of a childrens' story on the wrybill, written by local author, Jane Buxton. This appeared in the School Journal (Part 1, Number 4, 2008). The same author has written a children's book, which will be published before the end of 2009. Funding for both the School Journal story and the book has come from the Lotteries Environment and Heritage Fund.

In addition, a weekly email update was sent to all Group members during the breeding season.

3.4 SPRING BIRD SURVEYS (NL HAS HAD A GO – NEEDS NEW FIGURES)

As noted above (section 2.5) high river flows prevented the normal October survey being carried out. Results of the survey undertaken on 22 November, 2008, are shown in Table 2, with results of earlier counts shown for comparison.

Table 2 Results of the bird count undertaken in the Ashley River in November 2008. November counts from the previous three years are shown for comparative purposes

(Needs reformatting to put in 2008 figures – can send if you do not have them already)

Species (Nov 2007)	Dec 2006	Nov 2005	Nov 2004	Nov 2003
Black shag (10)	2	2	7	8
Little shag (4)	2	6	7	4
S Is. Pied oystercatcher (26)	5	22	37	22
Variable oystercatcher (0)	0	0	2	0
Pied stilt (164)	68	137	140	138
Black stilt (1)	1	1	2	0
Banded dotterel (237)	84	245	213	169
Wrybill (9)	5	7	9	16
Spur-winged plover (116)	37	149	27	13
Southern black-backed gull (12)	5	1	27	10
Black-billed gull (13)	213	3	10	0
Black-fronted tern (89)	180	26	28	102
Caspian tern (0)	1	0	0	4

Somewhat surprisingly, numbers of spur-winged plovers, which have been rising over recent years, were the lowest ever recorded since surveys began in 2000.

Need new comments – including the fact that surveys are just a count at one time; shown up by the fact that 1 week later a colony of 200 arrived off Groyne 1. Also the small bft colony seen during the survey at the Okuku/Ashley junction had disappeared a week later. Or in Discussion. Counts of most species were about average, although the numbers of pied stilts, banded dotterels, and spur-winged plovers were above average.

Numbers of wrybills were close to average, while black-billed gull numbers were below average, and a lot lower than in 2007 because there was no large breeding colony. Numbers of black-fronted terns were also much lower than in the previous season.

3.5 SHOREBIRD BREEDING (JD TO DO, NL HAS SUPPLIED HIS NOTES FOR THE 08/09 SEASON IN EMAIL OF 26/05/09– PRESUME YOU STILL HAVE THOSE?)

Locations of shorebird territories are shown in Figure 1.

Wrybills

Banded birds are identified by their colour-band combinations, bands are recorded left leg first and top to bottom (possible colours are: O=orange, R=red, B=blue, Y=yellow, G=green and W=white). M=metal, UB=unbanded.

(2008/09 – numbers of young chicks lost)

Breeding pairs

Four pairs of wrybills attempted to breed in the study area in the 2006/07 season.

1. Male: UB Female: UB

This pair appeared late in the season and occupied part of the Aerodrome territory, on the shallow braid towards the south bank. An empty scrape was found on 09 November; this contained 1 egg by the following day and 2 by 13 November. The nest was low-lying, and was washed out by the major flood on 18 November. A second nest of 2 eggs was laid about 25 m from the first, but by 15 December this had been abandoned. What was probably the male was seen in the same area, but no UB female was seen again in this territory, and it appears that she was lost during the second nesting attempt.

Result: No chicks fledged.

2. Male: UB Female: BO-YO

In 2006, the widow of the Racecourse pair (BO-YO) paired with a new UB male. This pair occupied the Aerodrome territory, also south of the main channel, and close to pair 1. They had a 2-egg nest by 09 November. It survived the major flood of 18 November, and both eggs had hatched by 06 December. One chick had fledged by 06 January, and 2 were seen on 21 January.

Result: 2 chicks fledged.

3. Male: UB Female: -MM

This was another new pair in the river. The female is distinctively banded, with a metal band on the right tarsus and another on the right tibia. They were found in the Big Island territory with a 2-egg nest on 09 December. This hatched late in December, and 2 chicks were seen in early January. One had fledged by 24 January. Whether this pair had an earlier nest that was lost is not clear, but searches of Big Island in early-mid November recorded no wrybills in this area.

Result: 1 chick fledged.

4. Male: RO-M Female: UB

This pair again occupied the downstream end of the Railway territory, in the vicinity of Groyne 22. Both birds were particularly secretive, and proved very difficult to monitor. There was no evidence of a nest on 19 September, but by early October the male's behaviour suggested that there was probably one somewhere on the gravel island north of Groyne 22. The female was rarely seen, but the male's behaviour in late November suggested that one or more chicks were present. One chick fledged and was seen with RO-M on 07 January.

Result: 1 chick fledged.

Overall result: 4 pairs fledged 4 chicks, for productivity of 1.00 chick fledged per pair.

Black-fronted terns

(2008-09 – many pairs appear to start nesting and then fail somewhere along the line; success better when in association with bbgs?)

Black-fronted terns bred at 5 sites during the 2006/07 season, with 3 sites having more than 20 pairs each. As usual, birds moved around in the study area early in the season, and areas that had substantial numbers in September and October (e.g. Dalziels) were not always used for nesting. One early nest was found hatching at Dalziels on 10 November, but most nests (e.g. those at Aerodrome and Big Island) were laid in mid-late November or later (e.g. at Marchmont). The 3 important sites were at Marchmont (21 pairs), Big Island (26 pairs), and Gull Colony, where 25 pairs nested, some on the same island as the gulls and others on a smaller one adjacent to it.

Result: 81 pairs fledged at least 55 chicks, for minimum productivity of 0.68 chicks per pair.

Black-billed gulls

(Would have been nothing, without late arrival of birds displaced by floods on Waimak)

During the bird survey undertaken on 03 December, a colony of black-billed gulls was located on a gravel island upstream of the Dalziels site. On 07 December, counts indicated that in total there were about 780 birds present. The colony was in two main parts, with one group of nests towards the northern edge of the island containing about 280 birds, and the second to the south of it containing about 430. About 70 birds were around the edges of the colony and appeared to be non-breeders.

Hatching had begun by 15 December and most nests appeared to have hatched by the following week. A visit on 15 January showed that the crèche of chicks had moved about 250 m downstream from the original colony site. Also on that date, 15 adult gulls were found dead among the southern group of nests at the original site. An empty cartridge box and 14 shotgun cartridges were scattered nearby.

As chicks fledged, some of them (and some adults) moved away from the colony and were seen at various points downstream, e.g. 90 (including 6 juveniles) were present in the Big Island area on 15 January. On the same date, a count from a photo at the colony revealed 190 chicks on the point of fledging. By 28 January, the remaining chicks had moved upstream, and about 100 remained. While there could have been a few losses between 15 December and the time when the last chicks fledged, these were probably offset by the juveniles that had already fledged and left the site.

Result: Approximately 190 chicks fledged from a colony estimated at 350 pairs (average productivity of about 0.54 chicks fledged per pair).

Pied oystercatchers

(2008-09: Single chick at Railway appeared to have broken leg, but still got to flying)

Eight pairs attempted to breed in the area between Dalziels and Golf Links Road. Three of these pairs (at Dalziels, Big Island, and Railway) fledged one juvenile each, for average productivity of 0.38 chicks fledged per pair.

Banded dotterels

Banded dotterels nested throughout the study area. The first nest was found on 05 September, upstream of Dalziels. However, there must have been nests before that date, as a chick about 1 week old was seen at Railway on 19 September. As previously, fledging success was only

recorded for a sample of pairs breeding in the areas that were monitored regularly. In these areas, 34 pairs fledged at least 22 chicks, for minimum productivity of 0.65 chicks fledged per pair.

Pied stilts

Many pairs of pied stilts bred in the study area, particularly in the Dalziels/Priors territories, where there were 11 pairs nesting in mid-November. Their productivity was not recorded.

Black stilt

One black stilt (GK-OW) has been resident in the study area for 3 years but had apparently not attempted to breed before this season. In 2006, it paired with a pied stilt and bred at the upstream end of the Dalziels site. No nest was found, but the two birds were defending chicks by 10 November. At least 1 chick was still present (and about 400 m further upstream) on 06 December. By 15 December, GK-OW had ceased defensive behaviour and it seemed very likely that the chick(s) had been lost.

4 Discussion (NL has had a go at all of this)

The three key shorebird species in the Ashley/Rakahuri river face three main threats, and the Group's activities continue to be focussed on reducing impacts from these.

1. The three species require a largely bare substrate for nesting, and weed growth in the riverbed results in loss of breeding habitat. In the past, the Group has cleared weeds from small selected sites, and contracted commercial gravel extractors for clearance of other new areas.
2. Introduced mammalian predators reduce survival and productivity. The Group undertakes predator control at sites where the three key species breed.
3. Disturbance by people, dogs, and vehicles reduces breeding success. The Group attempts to reduce disturbance by undertaking a range of advocacy and information initiatives, and installing signs on the river during the season.

4.1 HABITAT ENHANCEMENT

Given the practical difficulties and cost to the Group of clearing and maintaining large weed-free areas at many sites, and the fact that there is no guarantee that birds will use them for breeding, no hand weed clearing was carried out in 2008. The contribution of hand-weeding to the overall cleared area within the Ashley/Rakahuri riverbed is minor, compared to that cleared by floods and shingle extraction. A major flood in February 2008 significantly increased the overall weed-free area, and swept over all the very small percentage which had been cleared by hand or shingle removal previously. If any weed clearance by volunteer groups is carried out in the future, it will be carried out primarily for 'team building' and to actively involve the public on the river.

Having stated the above, past gravel extraction has cleared areas of weeds in the Racecourse, Golf Course and Marshmont sections of the river, all of which have been used at times for breeding by the three key species. Therefore, the Group will continue to maintain good relationships with commercial gravel extractors and try to involve them in the creation (and maintenance) of suitable habitat in areas they clear. It is now almost accepted practice for shingle operators to contact the Group prior to initiating extraction – seeking assurance that their work will not unacceptably disturb breeding birds. Experience has shown that birds are not worried by informed operators working machines nearby, and on one occasion early in 2008 (at the Marshmont site), a small shingle removal was carried out within 50 m of breeding terns, with no perceived ill-effect. In fact, the operators may have aided breeding success by maintaining barriers and signs.

However, one area which still needs more attention is the ‘manicuring’ of shingle extraction sites after completion, in order to make them as suitable for the birds as possible. During such work, it is important to have on-site supervision by someone who knows what is needed. Without appropriate supervision, the end results can be poor, despite the best of intentions by the machine operator. Following gravel extraction, the actions most likely to produce good breeding habitat have been listed previously (Dowding and Ledgard, 2008).

4.2 PREDATOR CONTROL

The number of trap-nights in 2008/09 was almost identical to that for 2007/08, but the number of predators trapped was only 55% of the previous season’s figure. The overall capture rate was 0.75 per 100 trap-nights, compared to 1.4 for 2007/08 and 1.6 for 2006/07. The main reason for the low 2008/09 figure was the decline in hedgehog numbers – which were only 44% of those caught in the previous season. It is suspected that the cause was major flood of February, 2008, which not only cleared away large areas of weeds which had been stable for many years, but also inundated much of the remaining land between the stopbanks. Numbers of cats and stoats caught were up slightly, and even though the increase was small, it may have been due to the greater frequency of rabbits in the riverbed. Since the arrival of RCD in the late 1990s, rabbits have been rarely seen, but in 2008 it was not unusual for them to be sighted. *(I know you will disagree with this, John, but it is worth noting that rabbit numbers are on the rise. Even though one has seen sign, for a number of years I did not actually see one – last season I quite often sighted them).*

Recruiting and supporting volunteer trappers over a 4-5 month period each season remains a substantial challenge for the Group. The small number of trappers available means that a major commitment is required from each of them. The Department of Conservation is constructing a new Area office in Rangiora (only 1 km from the river), and it is hoped that they may be able to assist in the training of trappers, and possibly in the trapping itself.

4.3 ADVOCACY

Overall, there is little doubt that the Group’s advocacy efforts over the past 5 years have resulted in a much higher local awareness of the problems faced by birds, and of the Group’s activities, on the Ashley river.

In 2008/09, the number of advocacy activities was higher than usual (see section 3.2). The core activities were continued, such as media articles, talks to special interest groups (using a specially prepared PowerPoint presentation), nightly Screenvista presentations for 4 months in the Rangiora cinema, and customised Corflute signs placed in managed riverbed areas during the season. In addition, presentations were made to four schools, coinciding with the publication of local author, Jane Buxton’s story appearing in the School Journal. In March, the Group’s Powerpoint address was presented to a meeting of the Lotteries Environment and Heritage Committee held at the Museum in Christchurch. They commented very positively on the Group’s high standard of advocacy. In the field, three groups were guided on visits to the river. The concentration of breeding birds out off Groyne 1, including all three of the focus rare and endangered species, was an excellent site for close-up views of nesting birds and their young. If such visits are well led, they can be a memorable experience, which causes minimal disturbance to the birds themselves. Further afield, the Group’s experiences on the Ashley River, led to invitations to visit and address similar groups on the Orari river in S. Canterbury and the Makarora River at the head of Lake Wanaka in western Otago.

Progress has been made with the children’s book ‘Ria the reckless wrybill’, written by local author, Jane Buxton. The text is written and the artist work completed. Lotteries Board funding

is assisting publication, and it is hoped that the book will be ready for sale before Christmas, 2009. The ARRG will receive 25% of all royalty payments.

During 2008/09, the Group has remained closely involved with progress towards the formation of the Ashley Rakahuri Regional Park. This plan has been approved by ECan, although the funds for its implementation may not be available until 2010. The Group is well aware that the Regional Park concept is integral to ensuring the professional and long-term management of the river, and hence a more secure future for the birds.

In October, 2007, the Group organised a meeting in Rangiora, which led to the formation of BRaid, a group which aims at bringing about better awareness and environmental management for all braided rivers in the South Island. Currently, BRaid meets regularly and currently is jointly chaired by two members of the ARRG.

Future advocacy for the birds on the river should be enhanced by the presence of the Department of Conservation in its new Area office being constructed in Rangiora, barely 1 km from the Ashley river.

4.4 SPRING BIRD COUNTS (NL HAS HAD A GO AT THIS)

As in the previous year, high river flows in October allowed only one survey to be carried out in 2008. This took place on November 22, with 15 participants. Overall, bird numbers were about normal. We now have good records of spring bird numbers over 5 years, but it should be noted that the counts only record bird presence on a single day, and that numbers can change quickly over short periods of time. For example, in the 2008/09 survey:

- Only 10 black-billed gulls were recorded, but 1 week later a colony of over 200 birds had settled off Groyne 1. Leg bands indicated that at least some of these birds had arrived after being flooded out on the Waimakariri river.
- Around fifteen of the black-fronted terns were seen in a small colony at the junction of the Okuku and Ashley rivers. Two days later, none were present, and they were not seen in this vicinity again.
- Eight wrybills were observed in a stretch of the river where eleven had been seen the previous weekend.

Earlier reports have recommended a survey of the stretch of river upstream of the study area, between the Okuku confluence and the Ashley/Rakahuri Gorge. Although much of this stretch of the river is known to have a heavy infestation of weeds, birds have bred there in previous years (Lindsay Rowe, pers. comm.). The survey has still not been undertaken, and remains a priority.

4.5 SHOREBIRD BREEDING (JD TO DO, NL HAS DONE NOTHING)

Wrybills

The recruitment of new birds in the river and the increase from 2 pairs to 4 within the study area are both positive signs. Productivity was also high, with the 4 pairs fledging 4 chicks between them. *(Comment on loss of chicks after hatching – 6 pairs known to have taken 2-egg clutches through to hatching stage)*

These aspects are balanced to some extent by the apparent loss of a female at the Aerodrome site. In spite of the increase in number of pairs, the Ashley wrybill population is clearly still very small, and further recruitment is required before it can be considered secure. Low adult survival is a growing concern, and further emphasis may need to be placed on control of cats and stoats around wrybill breeding sites.

Black-fronted terns

At least 81 pairs of terns nested within the study area. This is almost certainly the largest number in recent years. Three sites were each used by 20 or more pairs and breeding was successful at all 3 sites. Little is known about natal site fidelity in black-fronted terns, but if it is high the fledging of at least 55 chicks should make a significant contribution towards maintaining the population of this species in the river. Overall, the 2006/07 season was by far the most successful for terns in the Ashley since the formation of the ARR. G.

Black-billed gulls

The establishment and successful breeding of a large black-billed gull colony within the study area was another highly significant event this season. In recent years, colonies have either been vandalised (e.g. at the Aerodrome site in 2002/03) or have been abandoned after disturbance (e.g. at Groyne 1 in 2004/05), and the only successful breeding recorded locally has occurred at Ashworth's Spit on the coast immediately north of the Ashley Estuary.

Black-billed gulls are a fully-protected endemic species, and the shooting of at least 15 birds in late December or early January was an offence under the Wildlife Act. This incident was reported in The Christchurch Press on 20 January 2007.

Mention the concentration of birds off Groyne 1, and the close nesting and young-raising of the bbg's and the bft's. Plus that the bbg's (and some bft's?) arrived after displacement by flooding of the Waimak river.

Other species

Minimum productivity was recorded for 3 other shorebird species in the river. Pied oystercatchers produced 0.38 chicks per pair in 2006/07, similar to the 0.43 produced in 2005/06, but well below the 1.20 chicks per pair in 2004/05. Productivity of banded dotterels has been relatively consistent between years (0.65 in 2006/07 compared to 0.70 in 2005/06). The black stilt/pied stilt pair at Dalziels is thought to have fledged no chicks.

5 Conclusions (NL has had a go at this)

In terms of productivity of the 3 key shorebird species in the Ashley River, the 2008/09 season has been of mixed success. Wrybill and black-fronted tern numbers and breeding success was about average, although it was disappointing to see only three (possibly four) wrybill chicks fledge after six pairs are known to have taken 2-egg clutches through to hatching stage. However, thanks to the late arrival of a large colony displaced by flooding on the Waimakariri river, black-billed gulls had a very good year, with 256 fledglings from 332 nests. The number of pairs of these key species fluctuates annually, and continued intensive management will be required if they are to persist. In the short-medium term, the key to maintaining populations of these species in the river is to increase breeding success, particularly the survival of young wrybill and tern chicks. In the case of wrybills, it is becoming clear that adult survival is also an issue that will have to be addressed. (JD to update)

It is pleasing to record that a high profile has been maintained relative to public awareness and education, as this remains vital to the success of the Group's cause. This profile has extended beyond North Canterbury, thanks to involvement with BRaid, plus invitations to assist similar community groups elsewhere in the South Island.

The Group's aim of improving the breeding success of shorebirds on the Ashley/Rakahuri river, is a long-term one. In this regard it has been good to see the Department of Conservation relocating its Area office close to the river, and particularly pleasing to have ECan's approval of a plan for the Ashley Rakahuri Regional Park.

6 Recommendations (NL has had a go at this)

NB. A recommendation from the 2007/08 report was "Analyse productivity data for the three key species at the end of the 2008/09 season". What do we do about that?

- 1 Continue predator control, annual surveys, monitoring activities and banding, focussing on the three key threatened shorebird species. Seek assistance with predator trapping from DOC (Rangiora).

Justification

Continuing predator control will be essential if the three species are to survive in the river. Collection of information through surveys and monitoring is vital, as it informs future management and decision-making. Banding provides information on survival, pairing and movements of individual birds.

- 2 Continue advocacy initiatives, notably in schools – making full use of the Powerpoint presentation and local author, Jane Buxton's, soon-to-be published children's book on the wrybill.

Justification

Although awareness has improved significantly over recent years, it can only be maintained and improved by continued effort.

- 3 Continue full support to the 'BRaid' group.

Justification

The 'BRaid' group aims to improve environmental awareness and management on all South Island braided rivers, with the end result that more braided rivers should receive the same local community-based attention as is presently focused on the Ashley/Rakahuri river..

- 4 Maintain and improve collaboration with commercial shingle extractors.

Justification

Gravel extractors are the major commercial users of the Ashley/Rakahuri river, and have opportunities to create weed-free sites that encourage successful bird breeding. The ARRГ is in a position to advise on measures that will improve these sites.

- 5 Support the implementation of Environment Canterbury's Ashley Rakahuri Regional Park plan.

Justification

This plan offers the most effective way of achieving the Group's aim of maintaining key shorebird populations in the Ashley/Rakahuri river, and is due for implementation in the near future.

7. Acknowledgements (Has had NL attention)

We are particularly grateful to the significant 2-year grant received from the **Lottery Environment and Heritage Committee** of the **New Zealand Lottery Grants Board**, which was the major sponsor of the ARRG in 2007/08 and 2008/09. Major past sponsors have been the:

- Pacific Development and Conservation Trust
- New Zealand National Parks and Development Foundation
- * Habitat and Protection Fund of the World Wildlife Fund -New Zealand

The activities recorded in this report would not have been possible without their generous grants.

Other agencies and companies who have offered special assistance are Environment Canterbury, the Waimakariri District Council and the Department of Conservation. The Group also thanks its members and their friends and families for help with bird monitoring, participation in the spring survey, advocacy, and attendance at meetings. Particular acknowledgement must go to the small band of trappers, who weekly maintained many traps over a long season.

8 References (2008/09 report added)

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Appendix 1 Activity Chart for Ashley-Rakahuri Rivercare Group, Inc.
Plans for the period 01 July 2007 to 30 June 2008.

Month	Bird activity	Group activity
July	Breeding season gets underway	Monthly visits (c. 2 days/month) start by John Dowding (professional ornithologist). Records locations threatened birds are establishing. Trapping begins Vehicle access-ways into riverbed blocked off (ECan)
August	Early birds arrive	Bird monitoring continues – first nests usually found Regular trapping (40+ traps visited 1-2 times weekly) Group meeting (4-5 annually) Signs erected in river at major breeding areas Screenvista showing in local cinema (runs for 4 months)
September	Main season	Trapping and monitoring continue, visiting groups and individuals shown around. Nests and first chicks monitored. Monthly ads in local paper for 4 months - plus at least two articles
October	Main season	Trapping and monitoring continue, visiting groups and individuals shown around. Nests and chicks monitored. Group meeting October bird survey of Ashley River (12+ people) First BRaid meeting for all braided river stakeholders (organised by ARRG)
November	Main season	Trapping and monitoring continue, visiting groups and individual shown around. Nests and chicks monitored. Counting of juveniles and banding of wrybills begins (John D) November bird survey of Ashley river
December	Main season	Trapping and monitoring continue. Last nests found, chicks/juveniles monitored Group meeting (decide on equipment and budget for coming year)
January	Season concluding	Trapping and monitoring continue. Last juveniles monitored. Applications for funding should be well underway (this can take many evenings)
February	Last juveniles fly	Bring in traps, monitoring ends
March		Begin report writing for last season (John D main author) Article in local paper on previous season First Group meeting of year
April		Talks to schools and local groups – over winter months try to speak (show PowerPoint) to four schools, Lions, Rotary, etc Article in local paper advertising volunteer weeding days
May		First Group and volunteer weeding day (favoured breeding sites)
June		Group meeting and AGM Second Group and volunteer weeding day Weed clearance by bulldozer in main breeding sites

From June through to January: Weekly updates are sent by email to all Group members.
Chairman averages one email/day on ARRG matters.

Appendix 2 River flow (cumecs) at Ashley Gorge during the 2006/07 bird breeding season (from Environment Canterbury website).

Appendix 3. Agenda for the BRaid workshop meeting, held in Rangiora on October 9, 2007

‘BRaid – assisting breeding birds on braided rivers’

October 9, 2007

Rosburn Receptions, Spark Lane, Rangiora

PROPOSED AGENDA

9.30 – 10.0 am	Arrivals and morning tea	
10.00 – 10.10	Welcome	Nick Ledgard*
10.10 – 10.45	Overview of braided rivers	Colin O’Donnell*
10.45 – 11.20	Ashley river case study	Nick Ledgard
11.20 – 11.50	Waimakariri river case study	Andrew Crossland*
11.50 – 12.10	River Management options	Rob Gerard
12.10 – 1.0	Lunch	
1.00 - 1.10	Explanation of afternoon programme	Rob Gerard
1.00 – 1.30	Workshop 1.	

User/interest groups meet separately to sort out ‘how can we assist’ viewpoints.

1.30 – 1.50	Group viewpoints report back	
1.50 – 2.15	Workshop 2.	

Groups of mixed users meet to co-ordinate viewpoints. Groups should aim to answer two core questions:

- ~ What actions should be taken once we leave this workshop?
- ~ How can the statutory bodies assist these actions?

2.15 – 2.45	Group viewpoints report back	
2.45 – 3.00	Overview – where to from here?	Rob Gerard
3.00 – 3.10	Closure	Nick Ledgard
3.10 – 3.30	Afternoon tea	
3.30 on	Possible visit to Ashley river - for those with the time.	

*** Speakers.**

Nick Ledgard	Chairman, Ashley-Rakahuri Rivercare Group
Colin O’Donnell	Scientific Officer and ornithologist, Dept of Conservation
Andrew Crossland	Parks Ranger and ornithologist, Christchurch City Council
Rob Gerard	Senior Resource Care Co-ordinator, Environment Canterbury

COSTS

Nick Ledgard 20/3/05 9:52 AM

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Nick Ledgard 23/6/07 10:34 PM

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Most of the workshop costs are being met by funds granted via the Lotteries Environment and Heritage Fund. However, to cover a possible shortfall, a cost of \$5/head will be charged. Any 'profits' will go towards the Ashley-Rakahuri Rivercare Group's bird assistance work on the river.