



Allen Award

Application deadline: 28 February each year

The *Allen Award* is to support an outstanding postgraduate student to attend an international conference each year, in any field of marine science, with the aim of providing the student with the opportunity to gain international experience and contacts. By attending the international conference the student will serve an important role as an ambassador for Australian marine science through improving awareness in the international scientific community of the work of Australian research students. More information about the award can be found on the ASMA website (<https://www.amsa.asn.au/students/international.php>).

The *Allen Award* is supported by a bequest from the estate of the late [K Radway Allen](#).

Please refer to the eligibility criteria posted on the AMSA website before submitting your application (<https://www.amsa.asn.au/students/eligibility.php>).

Candidate details

Candidate name: Iain C Field

Degree enrolled in (Hons/MSc/PhD): MSc

Candidature commenced: 2007

Expected degree completion: 2010

Department / Institution: School of Zoology, University of Tasmania

Name of primary supervisor: A/Prof James R Smith

Presentation Information

Title of paper to be presented: Resource partitioning through oceanic segregation of foraging juvenile southern elephant seals

Abstract (no more than 250 words): In highly dynamic and unpredictable environments such as the Southern Ocean, species that have evolved behaviours that reduce the effects of intra-specific competition may have a selective advantage. This is particularly true when juveniles face disadvantages when foraging due to morphological or physiological limitation, which is the case for many marine mammals. We tracked the at-sea movements of 48 juvenile southern elephant seals (*Mirounga leonina*) between the ages of 1 and 4 years from the population at Macquarie Island using locations derived from recorded light levels. There were significant differences in the total amount of the Southern Ocean covered by the different age-groups. The younger seals used a smaller area than the older seals. On average, the younger individuals also made more trips to sea than the older seals and did not travel as far on each trip. Females spent more time at sea than

males and there were no significant differences between the total areas used by male and females. In summary, younger seals remained closer to the island at all times, and they spent more time in more northerly regions than older seals. These differences in behaviour created temporal and spatial segregation between juveniles of different ages. Therefore, we suggest that these temporal and spatial separations help to avoid intra-specific competition for resources on land, space on beaches, and at-sea foraging areas. Such modifications of haul-out timing and behaviour enable them to exploit a patchy and unpredictable environment.

Conference information

The international conference must be during the AMSA membership year (1 June - 31st May) following the conference closing date for application.

Conference name: International Bio-logging Symposium

Conference location: Nippon Polar Institute, Tokyo, Japan

Conference dates: 5-9 October 2009

Additional information

Funds requested from AMSA (Please give breakdown of costs):

| Expense | Amount |
|--------------------------|----------------|
| Return airfares to Tokyo | A\$1600 |
| Conference registration | A\$480 |
| | |
| Total | A\$2080 |

Amount of conference support from other sources (Please provide amount and name of funding institution or organisation, and whether the amount has been requested [A] or received [R]):

| Expense | Funding source | Requested (A) or received (R) | Amount |
|---|-----------------------|--------------------------------------|---------------|
| Accommodation (4 nights at a backpackers) | UTAS | R | \$260 |
| | | | |
| Total | | | |

Are you current member of AMSA? (please note the Allen Award is only available to current financial members of AMSA). *Membership number:* 007

Please provide a brief statement on the significance of the research to be presented and what you expect to gain from attending the international conference (in no more than one page of A4):

Please also provide:

- A brief curriculum vitae and list of any publications and conference activity.
- A letter from your PhD supervisor providing:
 - confirmation that the candidate is an enrolled PhD student or has submitted their thesis within the time limit
 - confirmation that the paper being offered is the candidate's own work
- Two referee's report on the candidate's merit for the award, one of which can be from the PhD supervisor.

Declaration

I have read the eligibility criteria posted on the AMSA website and submit this application in accordance with award requirements.

Signature of candidate:

Date:
