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Table of Contents

Tuesday October 27 2015	4
PS1 The Influence of Sex and Wind	4
PS2 Food and Foraging Areas.....	8
PS3 Monitoring Diet.....	12
PS4 Fishery Bycatch 1 - Assessment	17
S1 Individual Variation in Movement Strategies I	21
S2 Seabirds and Indicators of Ocean Health I	23
S3 Evolutionary Physiology	26
S4 Seabirds as Prey: Top-Down Control of Seabirds.....	30
S5 Individual Variation in Movement Strategies II	33
S6 Seabirds and Indicators of Ocean Health II	36
S7 Population Ecology of Penguins	39
PS5 Carry Over Effects (and Colony Effects)	43
PS6 Foraging Strategies.....	47
PS7 Tracking Methods.....	51
PS8 Fishery Bycatch 2 – Mitigation	55
Wednesday October 28 2015	60
PS9 Individual Specialisation.....	60
PS10 Foraging Aggregations	64
PS11 Studying Rare Seabirds.....	69
PS12 Radar and Green Energy	73
L1 Tracking Database Legacy Workshop.....	76
S8 Forage Fishery Impacts I.....	78
W1 Tackling Seabird By-Catch in Small-Scale Fisheries	83
S9 Green Energy Impacts	86
W2 Using Tracking Data to Define MPAs.....	91
S10 Forage Fishery Impacts II.....	94
S11 Host-Parasite Interactions.....	99
S12 Tropical Seabird Foraging Ecology	103
PS13 Habitat Selection.....	106
PS14 Breeding Biology 1 – Colony Structure and Mate Relationships	111
PS15 Disease	114

Poster Session 1	119
Biology.....	119
Diet.....	121
Genetics	131
Tracking.....	137
Thursday October 29 2015	170
PS16 Demography 1 – Climate and Life History	170
PS17 Migration and Orientation	174
PS18 Breeding Biology 2 – Performance and Experience	179
PS19 MPAs and Conservation Policy.....	184
S13 Advances in Design and Analysis for Seabird Demographic Studies.....	188
S14 Restoration of Seabird Nesting Islands	191
S15 International Agreements and Seabird Conservation.....	194
L3 & L4 Community Based Seabird Conservation Symposium and Workshop	198
S16 From Movement Ecology to Population Dynamics.....	201
S17 Establishing New Seabird Colonies	204
S18 Impacts of Oil Spills	207
PS20 Demography 2 – Extreme Events and Population Services	212
PS21 Island Restoration	215
PS22 Population Structure, Parasites and Pollution	219
S19 Researcher Disturbance on Nesting Seabirds	222
Friday October 30 2015	225
PS23 Climate Change	225
PS24 Diving Ecology	230
PS25 Population Monitoring.....	235
L5 & L6 Outcome Based Conservation Symposium and Workshop	238
S20 Impacts of Marine Debris.....	243
S21 Ecosystem Services provided by Arctic Seabirds	247
S22 Seabird Population Health	251
S23 Ecological/Evolutionary Rescue for Threatened Seabirds	254
W3 Advancing Gadfly Petrel Conservation.....	257
S24 Skuas/Jaegers: Travellers between the Poles	262
Poster Session 2	266
Bycatch.....	266

Conservation	275
Disease	284
Monitoring	287
Oceanography	309
Miscellaneous	310
Pollution	311
Renewables	313

P1-D-57 Habitat use and characterization of the seascape exploited by wintering adult and juvenile Southern Giant Petrels from Patagonia

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The characterization of the seascape used by top predators helps to understand the functioning of marine systems. The main goals of this study were to 1) analyze habitat use and at-sea movements of adult and first year juvenile southern giant petrels (SGP, *Macronectes giganteus*) during the austral winter, and 2) to characterize the oceanographic and biological features of their marine environment. We instrumented 15 SGP (six adults, nine juveniles) with satellite transmitters during 81.4 ± 37 days at Isla Arce and Gran Robredo at the end of the breeding period. The seascape was characterized using environmental variables, oceanographic regimes, ocean surface winds, and prey (squid) distribution. Adult birds used 74% of the Argentine shelf concentrating mainly at the shelf break and middle shelf waters. They alternated at-sea excursions (12 ± 5 days) with periods at the colony of 3 ± 0.3 days. Their environment lacked of thermal fronts, using depths of 100-200 m, exploiting mesotrophic environments, and remaining in areas related to the presence of squid. Juveniles spread to the Argentine, Uruguayan and Brazilian shelves moving first to the shelf break and then traveling northwards to the south of Brazil. Spatial overlap between age classes was only registered during the first 30 days after juveniles had fledged. Juveniles exploited a wide range of environments focusing mainly on productive waters due to the presence of thermal fronts in their utilization areas. The Argentine shelf offers a suitable environment for foraging; this may be why adults SGP from Patagonia spend all year-round within the area. The identification of non breeding areas used by SGP fills a gap in the species knowledge. The understanding of pelagic birds' habitat selection and preferences through the year is crucial for the monitoring and management of anthropogenic impacts over these species.

P1-D-58 Inter- and intra-specific segregation in foraging habitats of two sympatric giant petrel species with contrasting population trends

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Competition for feeding habitat can be a key selective pressure leading to individual specialisation, and potentially to speciation within animals that breed in sympatry. Inferior competitors can be forced to use lower-quality or more distant foraging areas, resulting in lower foraging efficiency and potentially increasing vulnerability if conditions deteriorate in response to anthropogenic threats. How foraging habitats are partitioned between conspecific and allospecific competitors can therefore have substantial consequences for population growth rates. Here, we examine spatio-temporal differences in habitat preference and their links with population trajectories in northern and southern giant petrels (*Macronectes halli* and *M. giganteus*), which nest in sympatry on Bird Island, South Georgia. The species have a similar physiology and ecology, yet the local population of northern giant petrels is increasing while southern giant petrels are stable or declining. Sexual segregation between males that feed predominantly by coastal scavenging, and females that forage in pelagic waters, has been observed in both species, but the extent varies with breeding stage. This may reflect the timing of peak carrion availability, and consequent habitat choice, relative to the breeding stage of the two species, which lay at different times. Here, using an extensive dataset on movements and activity patterns of northern and southern giant petrels of both sexes throughout