



# 10<sup>th</sup> International Penguin Conference

---

DUNEDIN | NEW ZEALAND – AOTEAROA 24 – 28 AUGUST 2019

## ABSTRACTS – POSTER PRESENTATIONS

**Note:**

- The abstracts in this booklet have been directly copied from the author(s), and the Local Organising Committee have not edited them in any way.
- Students are identified for the purposes of voting for the best poster presentation.

## Contents

1.	AGNEW, Philippa.....	4
2.	ALLARD, Stephanie.....	5
3.	ALLEY, Maurice.....	6
4.	AO Yuko.....	7
5.	ARRIAGADA, Maite.....	8
6.	BARBOSA, Andrés .....	9
7.	BARHAM, Peter .....	10
8.	BARREAU, Emmanuelle.....	11
9.	BARRIONUEVO, Melina .....	12
10.	BASTO-EYZAGUIRRE, Arianna .....	13
11.	BEAULIEU, Michael.....	14
12.	BORBOROGLU, Pablo Garcia .....	15
13.	BORBOROGLU, Pablo Garcia .....	16
14.	BRANSOME, Nicole .....	17
15.	BRIBIESCA-CONTRERAS, Fernanda.....	18
16.	CARPENTER-KLING, Tegan .....	19
17.	CHEREL, Yves .....	20
18.	CHIARADIA, Andre.....	21
19.	CHIARADIA, Andre.....	22
20.	CHRISTIANSON, Anne.....	23
21.	CIRIANI, Yanina.....	24
22.	COLE, Theresa .....	25
23.	COLOMBELLI-NEGREL, Diane .....	26
24.	CROFTS, Sarah.....	27
25.	DARNELL, Geneve .....	28
26.	DARNELL, Geneve .....	29
27.	DARNELL, Geneve .....	30
28.	DARNELL, Geneve .....	31
29.	DAVIS, Tanith .....	32
30.	DE BLOCQ, Andrew .....	33
31.	DELL'ARICCIA, Gaia.....	34
32.	DEWAR, Meagan.....	35
33.	DIAS, Maria .....	36
34.	DODINO, Samanta.....	37
35.	DRISCOLL, Maureen .....	38

36.	DYER, Bruce.....	39
37.	ELSOM, Henry .....	40
38.	GARLAND, Chloe Olivia .....	41
39.	GERALDENE, Beth .....	42
40.	GELDENHUYS, Deon.....	43
41.	GODOY REYES, Claudia.....	44
42.	GODOY REYES, Claudia.....	45
43.	GOLDSWORTHY, Rosalie .....	46
44.	GONZALEZ OLVERA, Merit .....	47
45.	GOWNARIS, Natasha.....	48
46.	GRAHAM, Kevin.....	49
47.	HANDLEY, Jonathan .....	50
48.	HERNÁNDEZ-COLINA, Arturo .....	51
49.	HOLT, Katie.....	52
50.	JOHNSON, Kathryn.....	53
51.	KAGAN, Ron .....	54
52.	LALAS, Chris.....	55
53.	LE GUEN, Camille.....	56
54.	LONG, Robin.....	57
55.	LUDYNIA, Katta.....	58
56.	LUDYNIA, Katta.....	59
57.	LUKIES, Kerry.....	60
58.	MATTERN, Thomas.....	61
59.	MATTS, Katie .....	62
60.	MAURER, Kyle .....	63
61.	MICHELOT, Candice.....	64
62.	MILLER, Rebecca .....	65
63.	MORANDINI, Virginia .....	66
64.	MORI, Yoshihisa .....	67
65.	NOJIMA, Daiki .....	68
66.	OKUBO, Michiko.....	69
67.	ORBELL, John.....	70
68.	PARDO, Celine .....	71
69.	PASSUNI, Giannina.....	72
70.	PINKERTON, Matthew.....	73
71.	RATZ, Hiltrun .....	74

72.	RATZ, Hiltrun .....	75
73.	REINHOLD, Sarah-Lena.....	76
74.	ROBB, Elvisa .....	77
75.	ROUYER, Marie-Morgane.....	78
76.	SCHNEIDER, Tom.....	79
77.	SHEWAN, Angela.....	80
78.	SNYMAN, Albert.....	81
79.	STANDER, Nicky.....	82
80.	SUZUKI, Kiyomi.....	83
81.	TIERNEY, Megan.....	84
82.	TRASNEL, Gwendoline.....	85
83.	TWORKOWSKI, Lauren.....	86
84.	VELDSMAN, Lu-Marie.....	87
85.	VIBLANC, Vincent .....	88
86.	WAGNER, Eric.....	89
87.	WASIAK, Paula.....	90
88.	WEIR, Jodie.....	91
89.	WELLINGTON, Pearl .....	92
90.	WILSON, Kerry-Jayne .....	93
91.	WOOD, Jamie .....	94
92.	WOOTTON, Tom .....	95
93.	YOUNG, Melanie .....	96

## 34. DODINO, Samanta

ELIGIBLE FOR STUDENT POSTER AWARD

### **Winter dispersal of Magellanic penguins at Martillo Island: Sexual differences in movement patterns and trophic ecology**

**Authors:** S. Dodino (1), L. Riccialdelli (1), M. Polito (2), K. Pütz (3), A. Raya Rey (1,4,5)

**Author Affiliation:**

(1) Centro Austral de Investigaciones Científicas (CADIC) – Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Ushuaia, Argentina

(2) Department of Oceanography and Coastal Sciences, Louisiana State University, Baton Rouge, LA 70803, USA

(3) Antarctic Research Trust, Am Oste-Hamme-Kanal 10, D-27432, Bremervörde, Germany

(4) Instituto de Ciencias Polares y Ambiente, Universidad Nacional de Tierra del Fuego, Yrigoyen #879, Ushuaia 9410, Argentina

(5) Wildlife Conservation Society, Amenábar 1595, Office 19, C1426AKC CABA, Buenos Aires, Argentina

**Abstract:** The dispersal of penguins during the non-breeding period is a critical period that can affect breeding success and survival in the following season. Thus, knowledge of penguin foraging ecology during this energy-intensive period is crucial to understand their responses to ecosystem variability. We recorded winter dispersal of Magellanic penguins *Spheniscus magellanicus* from Martillo Island (Beagle Channel, Argentina) using LAT2900 geolocators in 2017. We collected whole blood samples when the penguins first arrived at the colony in spring to study their pre-breeding foraging niche using stable carbon ( $\delta^{13}\text{C}$ ) and nitrogen ( $\delta^{15}\text{N}$ ) isotope analysis. In total, 26 adults were equipped after their annual molt, of which 24 were re-captured. However, only 20 were still equipped with devices and only 9 datasets could be recovered successfully. We found that penguins dispersed north along the Patagonian coast up to just south of Buenos Aires, Argentina ( $<38^\circ\text{S}$ ). In addition, prior to their return to the breeding site (August-September), females were mainly concentrated in more southern waters (between  $49^\circ\text{S}$  to  $55^\circ\text{S}$ ) relative to males (between  $41^\circ\text{S}$  to  $45^\circ\text{S}$ ). We also observed a significant difference between sexes in  $\delta^{13}\text{C}$  ( $W=25$ ,  $p<0.05$ ) but not in  $\delta^{15}\text{N}$  values ( $W=53$ ,  $p>0.05$ ), with females also having larger isotopic foraging niche widths (SEAb) relative to males. Differences in the spatial distribution and isotopic values between sexes likely reflect a pattern of niche partitioning during the non-breeding period. These results provide insights into mechanisms that may reduce intraspecific competition and can possibly inform sex-specific conservation strategies during the non-breeding period.

---