

## Supplementary Material

**Table S1**

Values ( $J$ ) of Jaccard's Index for comparing debris type between sites and between nest (N) and beach (B) debris at Brown Booby breeding locations.  $J$  values are considered significant when  $J > 0.6$ . UNDERLINED values represent a high degree of overlap between nest and beach debris types per site, thus indicating *no active selection* by the birds. Values in **BOLD** represent significant similarities between nest debris types across sites. Values in WAVY UNDERLINE represent similarities in debris types at beaches. Irrelevant  $J$  values have been removed for improved readability (comparisons between nest debris types and beach debris types at different sites). Sites 5. B, 6. B, 11. N, 12. N<sup>16</sup>, 12. N<sup>17a</sup> and 15. N are not included in this table as they were clean. The superscript on sites 3, 10 and 12 refer to the sampling year.

SITE	1. N	1. B	2. N	2. B	3. N <sup>16</sup>	3. B <sup>16</sup>	3. N <sup>17</sup>	3. B <sup>17</sup>	4. N	4. B	5. N	6. N	7. N	7. B	8. N	8. B	9. N	10. N <sup>17</sup>	10. B <sup>17</sup>	10. N <sup>18</sup>	10. B <sup>18</sup>	11. B	12. B <sup>16</sup>	12. B <sup>17a</sup>	12. N <sup>17b</sup>	12. N <sup>18</sup>	13. N	14. N	14. B	16. N	16. B	17. N	
1. B	<u>0.71</u>																																
2. N	0.30																																
2. B		0.56	0.36																														
3. N <sup>16</sup>	<b>0.60</b>		0.25																														
3. B <sup>16</sup>		0.37		0.33	0.50																												
3. N <sup>17</sup>	0.56		0.43		0.58	0.39																											
3. B <sup>17</sup>		0.29		0.30	0.43	<u>0.65</u>	0.30																										
4. N	<b>0.74</b>		0.31		<b>0.66</b>		<b>0.75</b>																										
4. B		0.48		0.43		0.53		0.36	0.31																								
5. N	0.46		0.53		0.36		0.43		0.44																								
6. N	0.37		0.50		0.53		0.55		0.47		<b>0.71</b>																						
7. N	0.59		0.56		0.44		0.59		<b>0.61</b>		<b>0.72</b>	0.57																					
7. B		0.50		0.40		0.34		0.18		<u>0.60</u>				<u>0.60</u>																			
8. N	0.47		<b>0.62</b>		0.46		0.54		0.47		<b>0.71</b>	<b>0.67</b>	<b>0.77</b>																				
8. B		<u>0.62</u>		0.50		0.46		0.36		<u>0.76</u>				0.54	<u>0.67</u>																		
9. N	0.52		0.46		0.47		0.52		0.54		<b>0.66</b>	<b>0.66</b>	<b>0.70</b>		<b>0.63</b>																		
10. N <sup>17</sup>	0.09		0.00		0.03		0.00		0.07		0.08	0.03	0.08		0.03		0.11																
10. B <sup>17</sup>		<u>0.61</u>		0.36		0.31		0.15		0.56				<u>0.77</u>		0.50		0.00															
10. N <sup>18</sup>	0.49		0.14		0.40		0.29		0.41		0.25	0.18	0.37		0.26		0.33	0.33	0.26														
10. B <sup>18</sup>		0.55		0.43		0.28		0.20		0.43				0.43		0.58		0.25	0.43	0.48													
11. B		0.42		0.36		0.28		0.15		0.56				<u>0.86</u>		0.50		<u>0.71</u>		0.43													
12. B <sup>16</sup>		<u>0.62</u>		0.50		0.43		0.37		0.53				0.49		<u>0.70</u>		<u>0.44</u>		<u>0.60</u>	0.44												
12. B <sup>17a</sup>		0.54		0.40		<u>0.72</u>		0.53		0.52				0.35		0.56		0.39		0.35	0.28	0.51											
12. N <sup>17b</sup>	0.22		0.08		0.24		0.10		0.19		0.23	0.20	0.20		0.19		0.31	0.50		0.52				0.23	0.23								
12. N <sup>18</sup>	0.22		0.00		0.15		0.15		0.14		0.00	0.00	0.08		0.05		0.03	0.00		0.14				0.06	0.06	0.02							
13. N	<b>0.69</b>		0.23		<b>0.63</b>		0.40		0.53		0.45	0.37	0.47		0.43		0.40	0.07		0.45						0.24	0.23						
14. N	0.45		0.33		0.30		0.33		0.44		0.49	0.38	0.47		0.40		0.54	0.33		<b>0.60</b>						0.48	0.00	0.33					
14. B		<u>0.68</u>		0.52		0.39		0.28		<u>0.66</u>				<u>0.71</u>		<u>0.71</u>		<u>0.69</u>		0.52	<u>0.61</u>	0.50	0.50										0.41
16. N	<b>0.63</b>		0.51		0.48		<b>0.68</b>		<b>0.65</b>		<b>0.63</b>	0.58	<b>0.85</b>		<b>0.71</b>		<b>0.66</b>	0.06		0.36					0.18	0.12	0.48	0.43					
16. B		<u>0.60</u>		0.53		0.35		0.27		0.57				<u>0.70</u>		0.57		<u>0.69</u>		0.47	0.63	0.40	0.40								<u>0.78</u>	<u>0.68</u>	
17. N	0.55		0.11		0.50		0.37		0.48		0.21	0.24	0.31		0.24		0.32	0.07		0.41				0.24	0.36	0.56	0.20				0.36		
18. N	0.56		0.49		0.43		<b>0.71</b>		0.56		0.53	0.54	<b>0.71</b>		<b>0.64</b>		0.56	0.01		0.29				0.13	0.18	0.40	0.36		<b>0.82</b>		0.34		

**Table S2**

Values ( $J$ ) of Jaccard's Index for comparing debris colour between sites and between nest (N) and beach (B) debris at Brown Booby breeding locations.  $J$  values are considered significant when  $J > 0.6$ . UNDERLINED values represent a high degree of overlap between nest and beach debris colours per site, thus indicating *no active selection* by the birds. Values in **BOLD** represent significant similarities between nest debris colours across sites. Values in WAVY UNDERLINE represent similarities in debris colours at beaches. Irrelevant  $J$  values have been removed for improved readability (comparisons between nest debris colours and beach debris colour at different sites). Sites 5. B, 6. B, 11. N, 12. N<sup>16</sup>, 12. N<sup>17a</sup> and 15. N are not included in this table as they were clean. The superscript on sites 3, 10 and 12 refer to the sampling year.

SITE	1.N	1. B	2. N	2. B	3. N <sup>16</sup>	3. B <sup>16</sup>	3. N <sup>17</sup>	3. B <sup>17</sup>	4. N	4. B	5. N	6. N	7. N	7. B	8. N	8. B	9. N	10. N <sup>17</sup>	10. B <sup>17</sup>	10. N <sup>18</sup>	10. B <sup>18</sup>	11. B	12. B <sup>16</sup>	12. B <sup>17a</sup>	12. N <sup>17b</sup>	12. N <sup>18</sup>	13. N	14. N	14. B	16. N	16. B	17. N	
1. B	0.45																																
2. N	0.23																																
2. B		0.37	0.15																														
3. N <sup>16</sup>	0.45		0.36																														
3. B <sup>16</sup>		<u>0.61</u>		0.28	<u>0.66</u>																												
3. N <sup>17</sup>	0.38		0.25		0.36	0.30																											
3. B <sup>17</sup>		<u>0.61</u>		0.25	<u>0.67</u>	<u>0.75</u>	0.20																										
4. N	0.48		0.14		0.38		0.40																										
4. B		0.38		0.15		0.30		0.38	0.29																								
5. N	0.35		0.49		0.46		0.12		0.31																								
6. N	0.55		0.20		0.46		0.34		0.47		0.39																						
7. N	0.42		0.27		0.38		0.27		0.41		0.43	0.54																					
7. B		0.57		0.51		0.41		0.42		0.32			0.59																				
8. N	0.30		0.43		0.32		0.32		0.23		0.22	0.36	0.37																				
8. B		0.40		0.36		0.46		0.36		0.25				0.36	0.55																		
9. N	0.41		0.34		<b>0.74</b>		0.24		0.32		0.41	0.47	0.32		0.33																		
10. N <sup>17</sup>	0.02		0.00		0.07		0.00		0.00		0.04	0.09	0.04		0.05		0.14																
10. B <sup>17</sup>		0.39		0.28		0.47		0.36		0.29				0.38	0.50		0.00																
10. N <sup>18</sup>	0.30		0.00		0.11		0.30		0.33		0.13	0.24	0.33		0.05		0.08	0.00	0.20														
10. B <sup>18</sup>		0.49		0.30		0.54		0.43		0.17				0.41	0.58		0.00	<u>0.71</u>	0.11														
11. B		0.33		0.15		0.48		0.43		0.17				0.24	0.50			0.50		<u>0.67</u>													
12. B <sup>16</sup>		0.51		<u>0.60</u>		0.35		0.34		0.30				<u>0.68</u>	0.32			0.38		0.34	0.18												
12. B <sup>17a</sup>		<u>0.65</u>		0.26		<u>0.73</u>		<u>0.76</u>		0.32				0.52	0.35			0.40		0.47	0.43	0.37											
12. N <sup>17b</sup>	0.32		0.20		0.40		0.15		0.19		0.26	0.33	0.28		0.26		0.51	0.38		0.06			0.24	0.24									
12. N <sup>18</sup>	0.23		0.00		0.07		0.15		0.20		0.13	0.24	0.33		0.04		0.05	0.00	<b>0.60</b>			0.09	0.09	0.04									
13. N	0.49		0.23		0.48		<b>0.62</b>		0.55		0.25	0.47	0.40		0.28		0.35	0.00	0.33					0.24	0.14								
14. N	0.23		<b>1.00*</b>		0.36		0.25		0.14		0.49	0.20	0.27		0.43		0.34	0.00	0.00					0.20	0.00	0.23							
14. B		0.43		0.16		0.43		0.46		0.31				0.24	0.21			0.35		0.32	0.35	0.45	0.45										0.35
16. N	<b>0.61</b>		0.30		<b>0.64</b>		0.21		0.47		0.53	0.49	0.40		0.30		<b>0.62</b>	0.07	0.17				0.38	0.12	0.36	0.30							
16. B		<u>0.69</u>		0.32		<u>0.60</u>		0.59		0.41				0.39	0.40			0.48		0.44	0.37	<u>0.63</u>	<u>0.63</u>								<u>0.58</u>	0.56	
17. N	0.51		0.35		<b>0.75</b>		0.26		0.44		0.55	0.52	0.39		0.30		<b>0.71</b>	0.06	0.12				0.34	0.09	0.42	0.35				<b>0.75</b>			
18. N	0.51		0.29		<b>0.63</b>		0.28		0.49		0.41	0.40	0.30		0.29		<b>0.62</b>	0.06	0.14				0.36	0.06	0.39	0.29				<b>0.76</b>		<b>0.67</b>	

\*Number of debris items recovered from nests on Adele Island and Rose Atoll was low, at only two per site.