



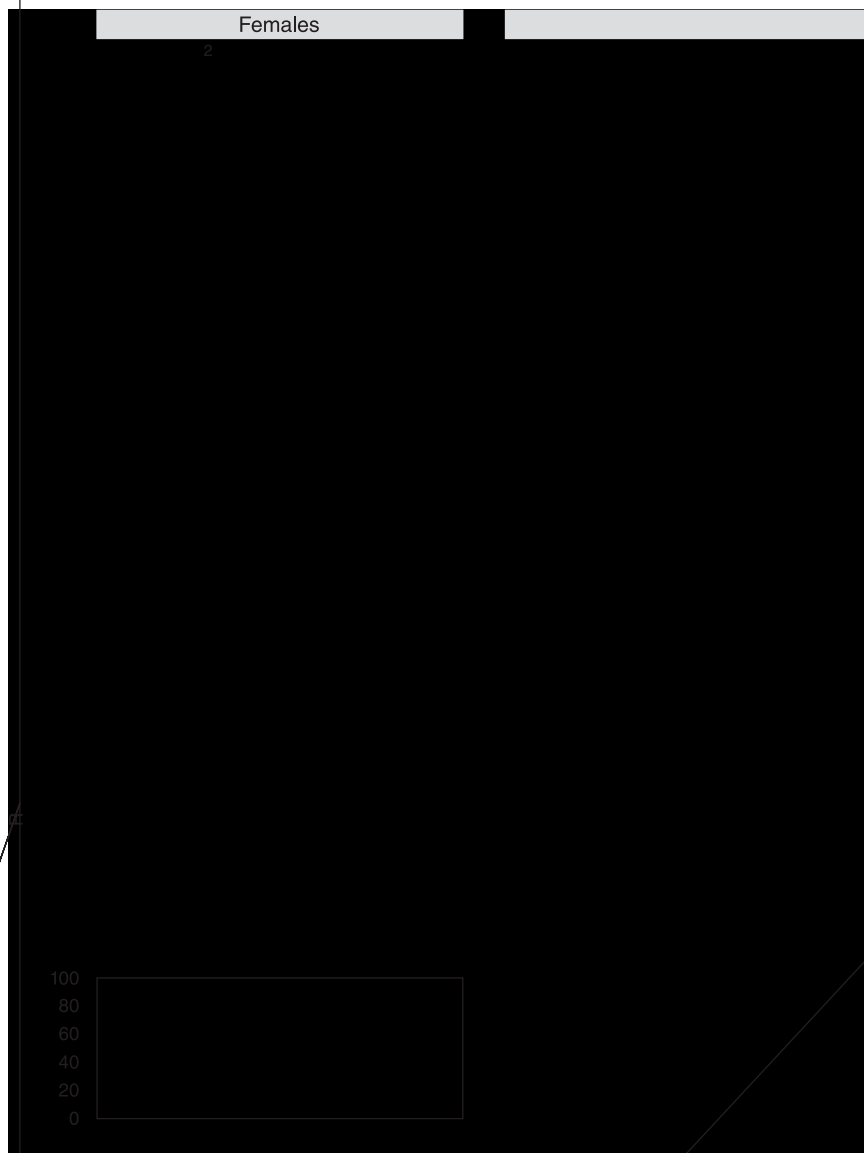
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**Sampling birds in the wild and in captivity**

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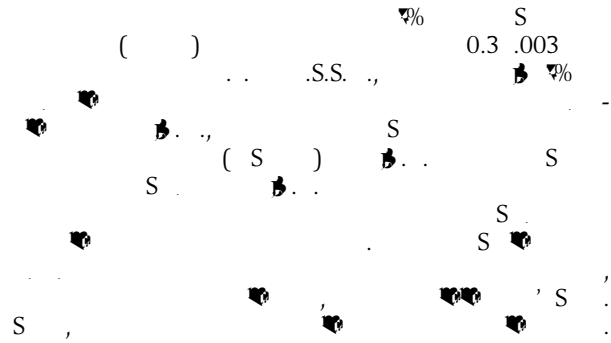
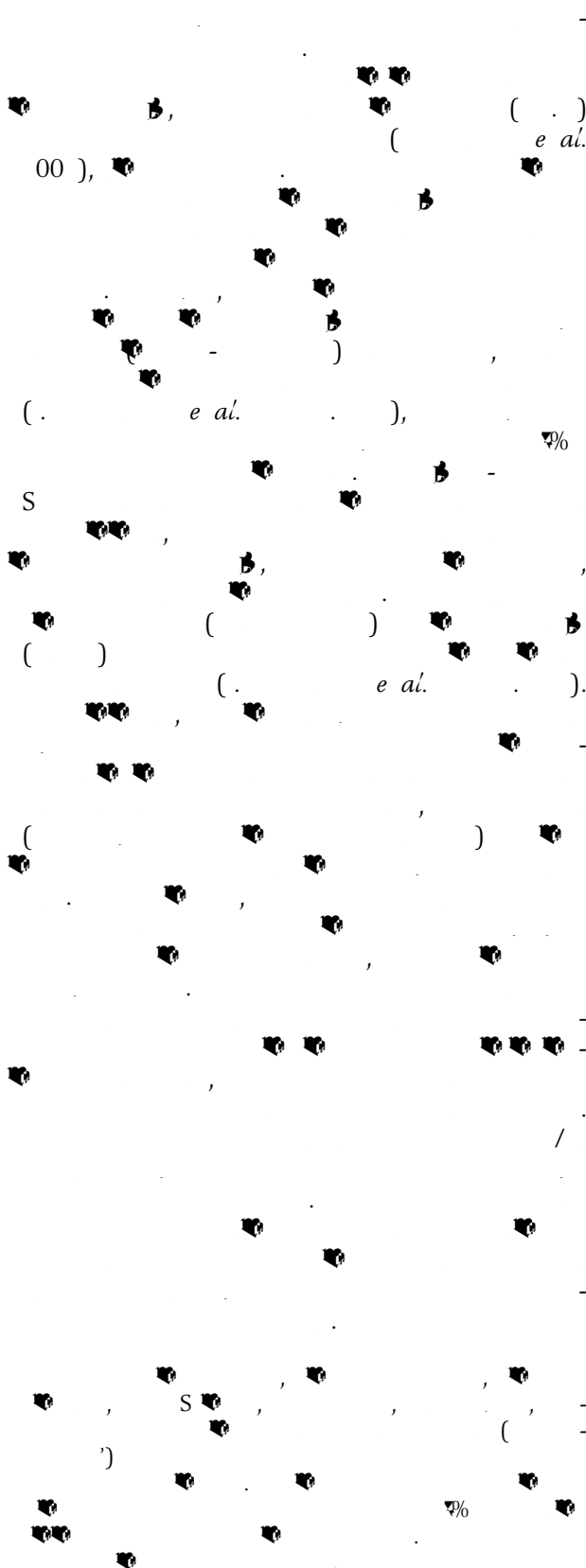
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## REFERENCES

- Baker, A.J., Piersma, T. & Greenslade, A.D. 1999. Molecular versus phenotypic sexing in Red Knots. *Condor* **101**: 887–893.
- Borowik, O.A. & McLennan, D.A. 1999. Phylogenetic patterns of parental care in calidridine sandpipers. *Auk* **116**: 1107–1117.
- Breiehagen, T. 1988. Nesting biology and mating system in an alpine population of Temminck's Stint *Calidris temminckii*. *Ibis* **131**: 389–402.
- Dekker, M., Piersma, T. & Sinninghe Damsté, J.S. 2000. Molecular analysis of intact preen waxes of *Calidris canutus* (Aves: Scolopacidae) by gas chromatography/mass spectrometry. *Lipids* **35**: 533–541.
- Erckmann, W.J. 1981. *The Evolution of Sex-role Reversal and Monogamy in Shorebirds*. PhD thesis, University of Washington.
- Griffiths, R., Double, M.C., Orr, K. & Dawson, R.J.G. 1998. A DNA test to sex most birds. *Molec. Ecol.* **7**: 1071–1075.
- Harrington, B.A. 2001. Red Knot (*Calidris canutus*). In Poole, A. & Gill, F. (eds) *The Birds of North America*, no. 563. Philadelphia, PA: Academy of Natural Sciences; Washington, DC: American Ornithologists' Union.
- Hildén, O. 1975. Breeding system of Temminck's Stint *Calidris temminckii*. *Orn. Fenn.* **52**: 117–146.
- Holmes, R.T. 1971. Density, habitat and mating systems of the Western Sandpiper (*Calidris mauri*). *Oecologia* **7**: 191–208.
- Holmes, R.T. & Pitelka, F.A. 1964. Breeding behavior and taxonomic relationships of the Curlew Sandpiper. *Auk* **81**: 362–379.
- Jacob, J., Balthazart, J. & Schoffeniels, E. 1979. Sex differences in the chemical composition of uropygial gland waxes in domestic ducks. *Biochem. System. Ecol.* **7**: 149–153.
- Jacob, J. & Ziswiler, V. 1982. The uropygial gland. In Farner, D.S., King, J.R. & Parkes, K.C. (eds) *Avian Biology*, Vol. 4: 199–324. New York: Academic Press.
- Jukema, J. & Piersma, T. 2006. Permanent female mimics in a lekking shorebird. *Biol. Lett.* **2**: 161–164.
- van de Kam, J., Ens, B., Piersma, T. & Zwarts, L. 2004. *Shorebirds. An Illustrated Behavioural Ecology*. Utrecht, The Netherlands: KNNV Publishers.
- Kolattukudy, P.E., Bohnet, S. & Rogers, L. 1987. Diesters of 3-hydroxy fatty acids produced by the uropygial glands of female mallards uniquely during the mating season. *J. Lipid Res.* **28**: 582–588.
- Lanctot, R.B. & Laredo, C.D. 1994. Buff-breasted Sandpiper (*Tryngites subruficollis*). In Poole, A. & Gill, F. (eds) *The Birds of North America*, no. 91. Philadelphia, PA: Academy of Natural Sciences; Washington, DC: American Ornithologists' Union.



- Moyer, B.R., Rock, A.N. & Clayton, D.H.** 2003. An experimental test of the importance of preen oil in Rock Doves (*Columba livia*). *Auk* **120**: 490–496.
- O'Reilly, K.M. & Wingfield, J.C.** 2001. Ecological factors