

## **An online workshop inspiring renewed interest in moult studies**

An online workshop about recording moult in the plumage of birds was held by Birds New Zealand on 5<sup>th</sup> February 2025.

In welcoming participants Dr. Natalie Forsdick, President of the Society remarked that the event was historic as it is the first online workshop to be held by the Society concerning a research topic on ornithology. Participants joined in from throughout New Zealand with even a few joining in from overseas. Natalie summarised the history of the Moulting Scheme that was launched by the Society in 1981 and has the aim of collecting information on the moult patterns of all New Zealand bird species and pointed out that numerous questions concerning moult continue to puzzle ornithologists. Natalie welcomed Dr Santiago Guallar – Collaborator at the Museum of Natural Sciences of Barcelona in Spain and the Catalan Ornithological Institute and a recognised international specialist on moult to present a broad introduction on the subject, and make other contributions to the workshop.

In his introduction Dr. Guallar reviewed the reasons, patterns, types, benefits and costs of moult in terms of rate of feather growth, aerodynamics and flight risks for bird survival across various species. Dr. Paul Fisher, David Melville, Rob Schuckard and Mike Bell presented moult case studies in silvereye, South Island fernbird, South Island Pied Oystercatcher and Swamp harrier, describing much of what is known, and importantly, raising challenging questions for further research. Dr. Guallar outlined in much detail the moult dynamics and the application of statistical techniques for the analysis for moult datasets using House sparrow and Monk parakeet (a pest in much of Europe and North America) as case studies.

Mike Bell described the use of photography to examine moult in Fluttering shearwaters using photographs provided by eBird observers, a promising tool for studying moult in seabirds that spend most of their lives at sea. On behalf of Graeme Taylor, David Melville described moult studies and techniques in burrowing seabirds, notably the taiko, grey-faced and flesh-footed petrels. Studies using stable isotopes may have potential in some moult studies. Speaking from California, Dr. Jesse Conklin's presentation on individual moult in Bar-tailed godwits from digital photography shows this method to be helpful yet time-consuming.

Birds New Zealand's moult recording scheme and its future management was discussed by Bruce McKinlay, while Michelle Bradshaw described the ability to record moult data in the New Zealand National Bird Banding Scheme FALCON system. Options for recording moult and collating moult records in the future were discussed by Dr. Guallar, David Melville and Dr. Fisher.

A lively question-and-answer session demonstrated the high level of engagement from participants, covering numerous topics and identifying areas where additional support and future research are desirable.

Nearly 100 participants took part in the online workshop. Proceedings were recorded and will be made available as an educational resource on the Birds New Zealand website. Funding for the workshop was provided by the Birds New Zealand Research Fund. Online support was kindly provided by Nelson City Council.

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Vice-President