

ROOST DEPARTURE BY SHINY COWBIRDS (*MOLOTHRUS BONARIENSIS*)*CHRISTOPHER J. FEARE¹ AND MARIA ELENA ZACCAGNINI²

RESUMEN. Algunas especies de aves coloniales se dispersan de sus dormitorios nocturnos en flujos continuos mientras que otras lo hacen en una serie de éxodos interrumpidos por un lapso más o menos regular. Discutimos el patrón de dispersión del tordo renegrido (*Molothrus bonariensis*) de dormitorios urbanos en la ciudad de Paraná, Entre Ríos. Las aves se dispersaron en flujos discontinuos, separados por intervalos de 2 a 5 minutos. Estos intervalos se mantuvieron en la ruta de vuelo hacia los sitios de alimentación en áreas agrícolas. Si bien se desconoce el significado biológico de tal comportamiento, en especies con patrón de dispersión similar, tal como el estornino hay un componente social, ya que en dormitorios monoespecíficos, los estorninos machos adultos predominan en los éxodos más tempranos mientras que hembras juveniles en los más tardíos. Planteamos el interés por analizar la persistencia de éste patrón en dormitorios mixtos de tordos en Norteamérica o bien en estorninos cuando éstos se agregan en dormitorios con tordos.

While some bird species leave their night-time roosts in a continuous stream (eg Rooks *Corvus frugilegus* C.J.F. pers obs), in others departure has apparently greater organization. For example, Starlings *Sturnus vulgaris* leave their roosts in a series of exoduses separated by intervals, usually averaging c.3 mins, during which no birds leave (Eastwood, Isted & Rider 1962, Feare 1984). A similar mode of departure was reported by Ward (1965) for Red-billed Quelea. At around 0745 (local time) on 28 Aug 1991, Shiny Cowbirds *Molothrus bonariensis* were observed dispersing from an urban roost, in Paraná (Entre Ríos Province, Argentina), towards agricultural land and flocks passing over, c.5 km SE of the roost appeared to do so at more or less regular intervals. Observations were therefore made at the roost, and on the flightline where the departing flocks were originally seen, in order to discover whether Shiny Cowbirds left the roost in a series of exoduses.

On 1 and 2 September 1991 C.J.F. monitored the departure of birds from their urban roost in trees in Plaza de Mayo, Paraná; all birds left in a SE direction. On the latter day M.E.Z. recorded birds passing over on their regular flightline c.5 km away.

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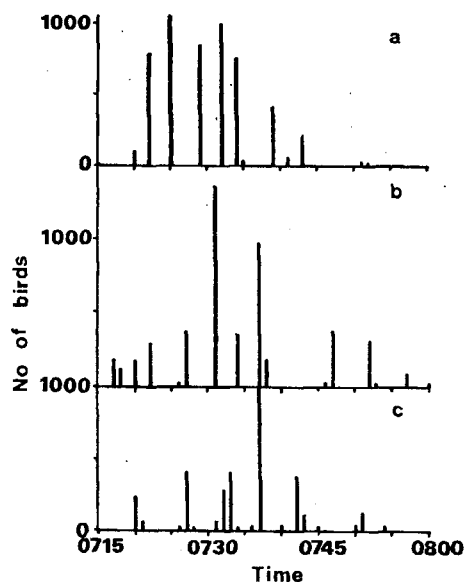


Figura 1. The times of departure of flocks of Shiny Cowbirds from a roost in Paraná, Argentina. a - departure from the roost on 1 September 1991 (n=5170 birds); b - departure from the roost on 2 September 1991 (n=5010); c - departure seen on a flightline 5 km SE of the roost (n=3284).

Observations were begun at 0700 (the sky began lightening at about 0645) and the number of birds leaving the roost or passing over on their flightline was recorded in each 1 min interval, recorded with watches with sweep second hands, until the roost was vacated or until no further birds appeared on their flightline. On both days the weather was overcast and dull, with a light NE wind.

Fig 1 shows the patterns of departure which was different, in terms of the relative sizes of departing flocks, on the two days. However, these data confirm that the birds departed in a series of exoduses, rather than in a continuous stream, with intervals usually of 2-5 mins. These intervals were also detected on the flightline, although the departure peaks were less distinct 5 km from the roost. At the roost, birds were already singing when observations started but, unlike Starlings (Feare 1984), there was no diminution in the volume of song immediately before an exodus.

This pattern of roost departure by Shiny Cowbirds is of interest since it has not been reported in other icterids. Notably, departure in exoduses was not reported in Red-winged Blackbirds *Agelaius phoeniceus* (Meanley 1965) or Brown-headed Cowbirds *Molothrus ater* (Good &

Johnson 1976) and, although no data were collected, CJF gained the impression that mixed roosts of Red-winged Blackbirds, Brown-headed Cowbirds and Grackles *Quiscalus quiscula* departed large roosts in Kentucky, USA, in a continuous, prolonged stream. While the biological significance of episodic departure remains unknown, in Starlings there is a social component, since adult males predominant in earlier exoduses while first year females depart mainly in later ones (Feare 1984, Summers & Feare unpublished information). In view of the present findings with Shiny Cowbirds, it would clearly be of interest to confirm the lack of episodic departure in the North American blackbird complex, and also to discover whether Starlings retain their departure pattern when roosting in mixed assemblages of blackbirds.

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VARIACION ANUAL EN EL NUMERO DE ADULTOS REPRODUCTIVOS EN UNA NUEVA COLONIA DE PINGÜINO PENACHO AMARILLO *EUDYPTES CRESTATUS* (SPHENISCIDAE) EN ISLA PINGÜINO (SANTA CRUZ, ARGENTINA)*

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ABSTRACT. A new breeding colony of *Eudyptes crestatus* was described and censused during six breeding seasons. This rockhopper penguin colony is located 35 km from Puerto Deseado (Santa Cruz, Argentina). Data presented in this paper show a clear population increase in the number of breeding adults (27% annual). Hypothesis are presented to explain some annual variation observed.

INTRODUCCION

El Pingüino Penacho Amarillo *Eudyptes crestatus* es una de las especies de pingüinos con mayor distribución geográfica; ocupa un amplio sector subantártico incluyendo el archipiélago del Cabo de Hornos, Isla de los Estados e Islas Malvinas (Murphy 1936; Warham 1975; Harrison 1983; Croxall et al 1984). También es citada en la Isla Grande del Tierra del Fuego y al sur del Estrecho de Magallanes en los canales fueguinos (Humphrey et al, 1970).

El estado actual de la especie en nuestro país, ha sido poco documentado y aunque Croxall et al (1984) citan 44 colonias con un total de 2.500.000 adultos reproductivos en las Islas Malvinas, no se conocen estimaciones de las colonias de la Isla de los Estados.

Este trabajo se realizó en la colonia de la Isla Pingüino (47° 45' S y 65° 54' W), descubierta en diciembre de 1985 por uno de los autores (M. Oliva Day). Esta colonia de nidificación es la más septentrional citada para esta especie y ampliaría aún más su área de distribución (Olog 1979).

La colonia se encuentra en uno de los muchos cañadones de roca volcánica presentes en la isla. Los nidos son pequeñas oquedades en el suelo o bien en las rocas y son recubiertos por pastos y guano.

La temporada reproductiva de esta especie comienza en octubre y finaliza en marzo con la independencia de los pichones.

El objetivo de este trabajo fue estudiar la variación poblacional de esta nueva colonia a lo largo de varias temporadas reproductivas a través del número de adultos nidificantes en la misma.

MÉTODOS

Durante 6 estaciones reproductivas consecutivas (desde 1985 a 1990), se realizaron viajes en diferentes épocas del período reproductivo.

Dada la gran densidad de aves nidificantes y a que su número total no era excesivamente alto, se

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