

Nest-site reuse by the White-collared *Streptoprocne zonaris* in south-central Cuba

Rosalina Montes¹, Josabel Belliure² y Rubén J. Chamizo¹

1. Jardín Botánico de Cienfuegos, Cuba. E-mail: montesninin@gmail.com chamizoruben@gmail.com

2. Universidad de Alcalá. Dpto de Ciencias de la Vida. Madrid, España. E-mail: josabel.belliure@uah.es

Introduction

Nesting is a prerequisite for breeding in a wide range of birds, and nest-sites become a key resource ultimately influencing individual fitness. In that context, reuse of nest-sites by breeding pairs has been observed in a variety of bird species. White-Collared Swifts (*Streptoprocne zonaris*) constitute one example in which reuse of nest-sites from previous reproductive seasons has been reported.

In this study we explored this behaviour in the main location of the species in Cuba, the natural area of Topes de Collantes (south-central Cuba), where breeding pairs distribute in several natural rocky caves. We also studied nest-sites locations to identify determinants for reuse and followed nest content to quantify nesting success

Materials and Methods

We studied 82 nests during 3 years of study, in 3 nesting colonies in Topes de Collantes, south-central Cuba.

We have recorded:

- ✓ Nest height
- ✓ Location (ceiling or wall)
- ✓ Placement (ledge or holle)
- ✓ Cave hall type
- ✓ Number of uses of the nest position
- ✓ * Each exact point where a nest was built was called a nest-site



El Colín Vegas Grandes Waterfall La Batata Cave

Results

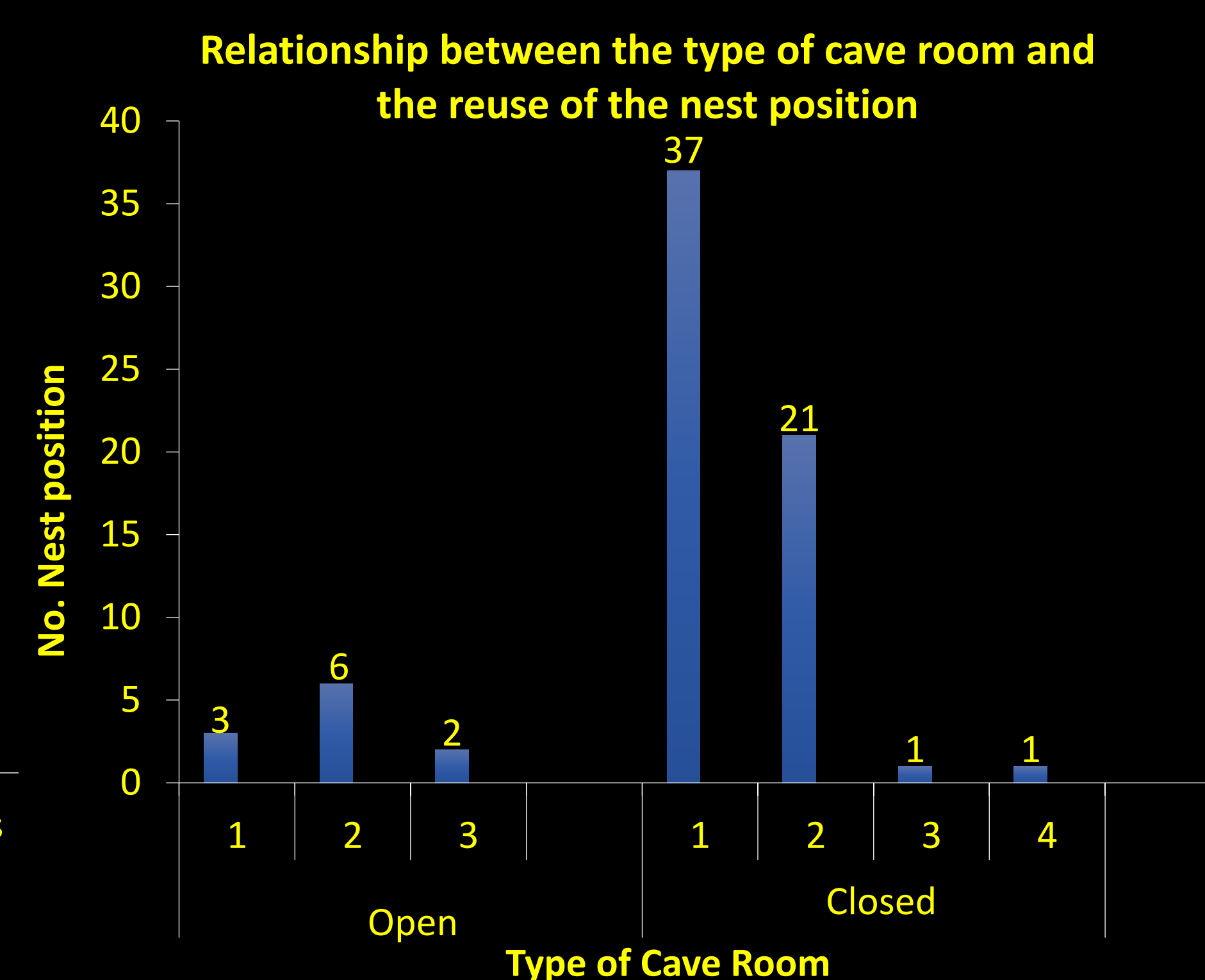
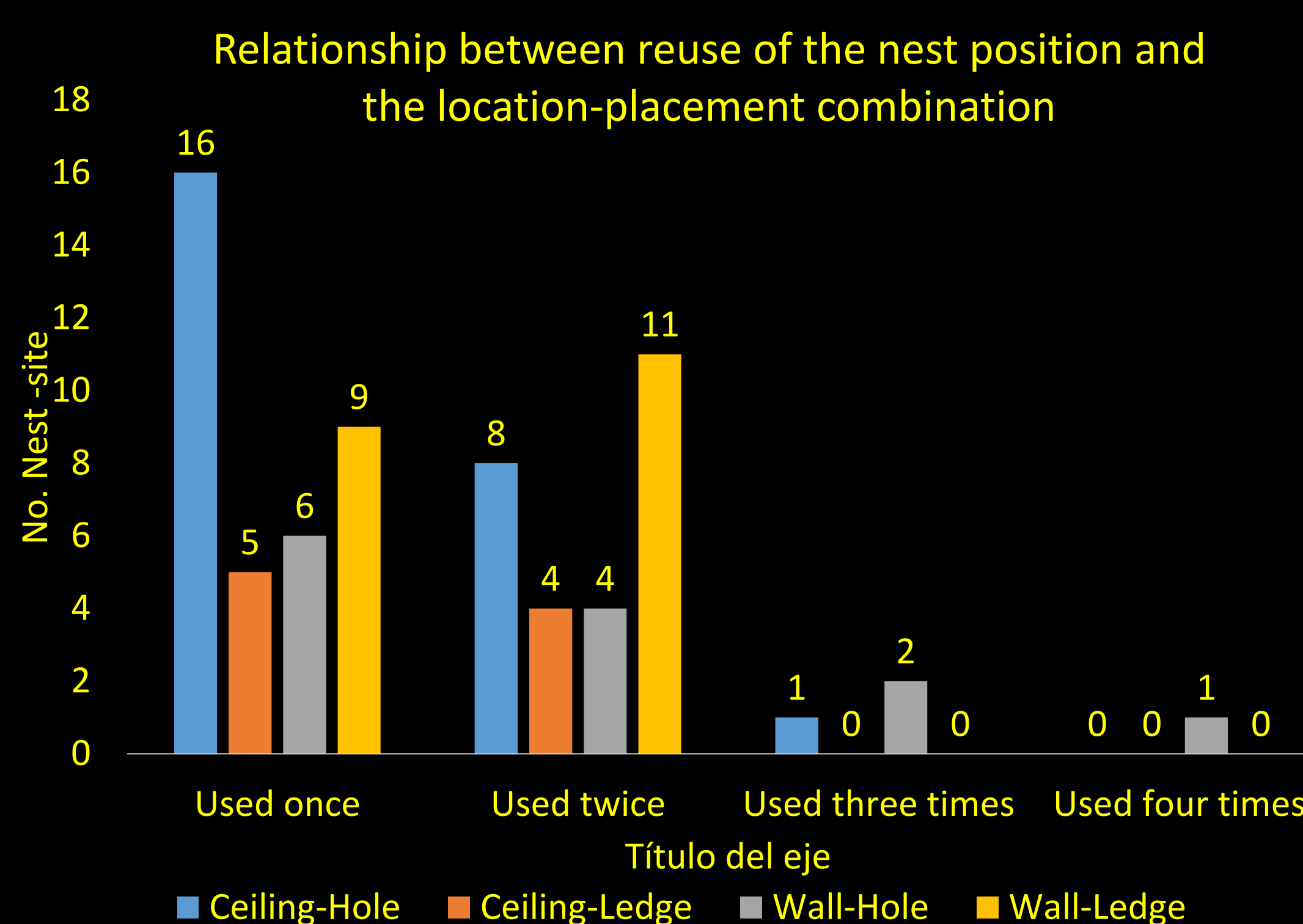
Nest-sites occupied up to four combinations of location and placement in the caves: ceiling hole, ceiling ledge, wall hole, and wall ledge.

The height of the nest-site was between 0.90 and 9 m.

A total of 31 nest-site were reused at least once, which implies a reuse incidence of 46.3%.

Reuse was related to the characteristics of the location of the nesting sites: reused nest-sites were observed less frequently in the roof-ledge combination, as well as in the highest places in the caves.

Nesting success (at least one chick abandoned the nest) was higher in reused nest-sites (87.1%) than in non-reused nest-sites (59.5%).



nests used once



Nests reused on several occasions

These results confirm the existence of nest-site reuse in the Cuban populations of the White-collared Swift, suggesting that quality breeding pairs might detect and select particular nest-sites to guarantee a successful breeding. This study also highlights that conservation of the caves and their natural characteristics at the natural area of Topes de Collantes is key for the Cuban populations of the species.