CAVE DWELLING ANIMALS IN IRAQ PART 2: SYSTEMATIC NOTES ON THE NUTHATCH OF THE FAMILY SITTIDAE (AVESPASSERIFORMES) IN IRAQ WITH ADDING SOME IMPORTANT KNOWLEDGE TO THE NEST BUILDING OF SITTA TEPHRONOTA SHARPE, FROM BESAN VALE HAWRAMAN SLOPE. IRAQI KURDISTAN

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## **ABSTRACT**

This paper is a review of the genus *Sitta* in Iraq, Five species of this genus are recognized *Sitta kurdistanica*, *S. neumayr*, *S. europaea*, *S.dresseri* and *S. tephronota*. Geographical distribution and systematic nots were given for separation and identification, also some notes on nest building and nest sites of *S. tephronota* supporting by figures are presented.

### INTRODUCTION

There is some confusion in previous systematic studies of Nuthatches in Iraq. This because of position of Iraqi land, it like a lands bridge between three large zoogeographical zones,i.e. Palearactic, Indian, and Ethiopian region,(Hawramany,2007). This create a great diversity of species and sub-species in this particular area.

The previous authors are mostly depended on literature for their work, (Allous, 1960. Mahdi and George, 1962., Lepage, 2004. Salim, etal. 2006.) They mentioned to three species of Nuthatch to be found in Iraq: Sitta europaea L., 1758., S. tefronota, Sharpe, 1872., S. neumayer, Michaelles, 1830. Ticehurst (1923) and Zarudny and Buturlin (1906) Described some variety of this family. Kinnear (1949) recorded two species of nuthatch in India and Bruun (1969), gave three species to be found in Europe. Wall creeper Tichodroma m. muraria (L.) is not cover by this study, since they put it in a separate Family (Tichodromidae). Allous (1960) and Mahdi and George (1962) neglected variation giving by other authors such as Vaurie (1959) who described some variety. Also the study include some information on nest building of Rock Nuthatch depending on field observations and on Berger, 1961., in Besan-Tawera valley, Hawraman slope north east of Iraq. This paper is a part of larger project (Cave dwelling animals in Iraq).

### MATERIAL AND METHODS

This study based on collection of the Natural history museum of Baghdad university, and on four specimens of Nuthatch collected by author from Besan-Tawera valley (600-1200 m.a.s). Figures were taken by photo camera (Canon) and Video camera. Literatures, were used too.

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# RESULT AND DISCUSSION

The study of Mlikovsky (2007), on *S. neumay* complex classified some variety as a separate species. In our collection we faced some confusion and problem, if we follow mlikovesky we can solve some of these problems.



 $Fig. 1: \textit{Sitta tephronota} \ from \ Besan-Tawera\ valley\ Hawraman\ step\ north\ east\ of\ Iraq.$ 

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Table.1: Measurements of Nuthatch *Sitta sp.* Collected by museum staff and author randomly according to collection site, T. L. = Total length

	T.L.	Bill	Wing	Tarsus	Tail
Besan- Tawera Valley	13.8-14cm.	3cm.	9-10 cm.	3cm.	5-6cm.
Zakhow	13.25	3	8.9-9	2.9-3	5.5-6
Dohok -Amadiah	12	2.6	7.5	2.5	5
Injanah- Hamrin mountain	11	3	8.5	2.2	5
Gali Ali Bag- Arbil	13.5	3	9.5-9.2	3	4.9-5.5
Dohok prov.	10.5	2-2.2	7.9-7.5	2-2.5	4.5
Chwarta – Sulaymanyah	13.5	3	9	3	6

Table (1) showed the measurements of *Sitta sp.* Collected from different localities mapping in fig.(8). Color variation could be seen in fig.1,2,3, and 4.

Sitta kurdistanica, Ticehurst. 1923. Fig3, and Table 1.

Sitta neumayer kurdistanica. Ticehurst: =

This is a small Nuthatch does not reach more than 11cm. The bill (2-2.6cm.) short and weak, shorter than the other species of the family. This Nuthatch differs from *S. neumayer* in size and nesting in tree holes. It is distributed in all Kurdistan mountains, our specimens of Dihok regarded as a topotype for this species. This nuthatch was classified by Ticehurst 1923 as *S. neumayer kurdistanica*, but Mlikovsky, 2007. Refer it to separate species *Sitta kurdistanica* and she said it's one of the *neumayer* complex depending on type study.

Sitta europaea. Linnaeus,1758.: Two specimens were studied from Gali Ali bag, north of Erbil, Its recognized by presence of white spots on tail.

Sitta neumayer, Michahelles, 1830. Its Known by lacking white spots on tail, and differs from S. kurdistanica in size and habitats. There are two specimens from Zakho and another captured by a citizen alive from Chwarta north of Sulaymanyah fig. (7).

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Sitta dresseri, Zarudny & Buturlin, 1906.Fig.,3: This nuthatch in the size of S.kurdistanica,, but its existence is located in Hamraen mountain east of Iraq south of Kurdistan of Iraq, which's in the distribution range of S.dresseri in Shushtar Iranian side of Zagros Mountain, type locality. It has stronger bill than that of S. kurdistanica. Dorsal color light grey with faint brown wash posterior on the large feather of the wing and posterior half of the ventral side. Sitta tephronota, Sharpe,1872.Fig.1,3.

Place of collection: Besan-Tawera valley, Hawraman step. Sulaymanyah.

It is little larger than the other member of the family in Iraq Table (1), easily recognized by white color of first and last large feather of the tail, and presence of black spot on the wings cover. Flanks and underside of the tail with dark chestnut color.

Nest building: In the case of *S. tephronota* the sexes pair for life and remain together throughout the year. Both sexes sharing in the nest building. About one month is required for repairing the destroyed nest. Through all the year they add to the nest. They build the nest mainly from mud strengthen it by pieces of dry grass,tree leaves and other materials. They build the nest attached to the rock of caves in mountain slopes and on the trees,fig.2, 4,5.The size of the round nearly black opening of the nest,6 cm. and 1.5 cm. thick, it is very good designer for hiding and mimic the surrounding rocks and trees, 1.5-2meter high from the ground, mostly the female stay at night inside the nest and the males near the opening. Female lays 5-6 White egg,20×15mm., differ than that of *S. Europaea* which given by Hanzak,1978, in lacking of spots on shell and the number of the eggs. They are suffering from mans by capturing young and adult also destroying the nest.In a valley 2km. 10 nest was destroyed by man Fig.6 plate1.

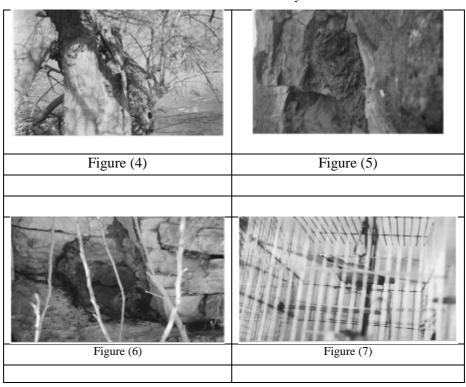
Plate: 1

Figure (2)

Figure (3)

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## Plate 1:

- Fig.2: Nest of Sitta tephronota from Besan-Tawera valley Hawraman step,
- **Fig.3**: From right to left. S. kurdistanica, From dihok, S. neumayer, From Zakhow, S. europaea From Gali Alibag north Irbil, S. dresseri. From Inganah Hamrain mountain.
- Fig.4: Nest Attached to tree.
- Fig.5: Nest attached to rock of the cave.
- Fig.6: Destroid nest.
- Fig.7: Capturd S. Neumayer. From chwarta North of Sulaymanyah.

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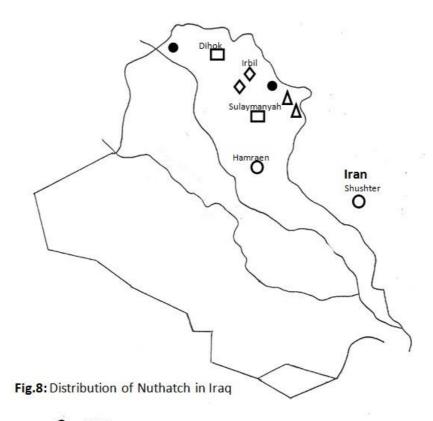
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- Sitta neumayer
- ♦ S. europaea
- □ S. kurdistanica
- ∆ S. tephronota
- O S. dressers

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ملاحظات تصنيفية لطائر كاسر الجوز من عائلة Sittidae في العراق مع إضافة معلومات مهمة عن تعشيش كاسر الجوز الصخري الكبير S. tephronota في وادي بي سان على حافة جبل هورامان في كردستان العراق

سامان روستم افراسياب لهوني مركز بحوث و متحف التاريخ الطبيعي – جامعة بغداد

## الخلاصة

تتضمن هذه الدراسة مراجعة تصنيف فصيلة كاسر الجوز في العراق. تم التعرف على خمس أنواع تابعة لهذه الفصيلة وهي S. europaea و S. neumayr و Sitta kurdistanica و S. dresseri و S. tephronota و S. dresseri تصنيفية أعطيت من اجل تشخيص و التفرقة. بالإضافة إلى بعض المعلومات عن العش و مكانها لنوع S. tefronota .