

Photo-Shorts

Invertebrate Prey in the Diet of the Pin-tailed Parrotfinch *Erythrura prasina*

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The Pin-tailed Parrotfinch *Erythrura prasina* is well documented locally to take bamboo seeds (Wells 2007). It has also been documented to take rice and other grass seeds in the wild; in captivity it eats smaller seeds of grass and millet (Clements *et al.*, 1993; Payne 2020).

Wells (2007) questions what the diet may include during periods of relative shortage of bamboo seeds, and notes that during one 15 minute observation where "*a lone male on the ground, working its way slowly along a small stream running under high bamboo cover, dipping its bill into water at intervals and searching purposefully among fallen leaves, either for fallen seed or small invertebrates. Unfortunately, while in view it took nothing.*" This observation suggests other prey sources.

On 02 May 2021, 12 August 2021 and 16 August 2021 I observed a group of five Pin-tailed Parrotfinches foraging at a stream at Perak, Malaysia (Plate 1) for over 45 minutes on each occasion. There was one male and four females. They were feeding on a small snail species from the stream (Plate 1 & 2).



Plate 1: Video grab images of Pin-tailed Parrotfinches foraging at a stream and feeding on snails, Perak, Malaysia, 12 August 2021.

They would obtain the snails from the stream rock surface or submerge their heads to acquire them in the stream bed or rock under water (Plate 3 & 4). They held the snails in the beak, with the opening facing towards them, and flicked their tongues rapidly to acquire the prey. After searching for snails and feeding for a while, having eaten approximately seven to nine snails each, the birds would fly to the plants by the side of the stream and rest for 10 to 15 minutes before resuming feeding on the snails again. During the observation periods they were seen feeding only on the snails.



Plate 2: Pin-tailed Parrotfinches feeding on snails in a stream, Perak, Malaysia, 16 August 2021.



Plate 3: Video grab images of a Pin-tailed Parrotfinch foraging for snails under water at the edge of a stream, Perak, Malaysia, 16 August 2021.

Videos of the activity can be seen here: <https://www.youtube.com/watch?v=LUkAHTrlp4>,
<https://youtu.be/4BjEFoWJwY>, <https://www.youtube.com/watch?v=IbYv1oVV6k>,
<https://www.youtube.com/watch?v=l7ptQfmD-mI>.

The snail identity is uncertain but possibly a *Sulcospira* species.



Plate 4: Video grab images of a Pin-tailed Parrotfinch foraging for snails under water in the midst of a rushing stream, Perak, Malaysia, 16 August 2021.

This observation broadens our understanding of the diet of Pin-tailed Parrotfinches to include invertebrates

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References

1. Clement, P., Harris, A. & Davis, J. (1993). *Finches and Sparrows: An identification Guide*. Princeton University Press.
2. Payne, R. B. (2020). Pin-tailed Parrotfinch (*Erythrura prasina*), version 1.0. In Birds of the World (J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana, Editors). *Cornell Lab of Ornithology*, Ithaca, NY, USA. <https://doi.org/10.2173/bow.pitpar1.01>
3. Wells, D.R. (2007). *The birds of the Thai-Malay Peninsula: Vol. 2 (Passerines)*. London: Christopher Helm.

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Commentary on the Observation by David Wells, Amar-Singh HSS & Dave Bakewell

This fascinating observation helps us to better appreciate the diet of Pin-tailed Parrotfinches. A review of images in the Macaulay Library (2024) for Pin-tailed Parrotfinch (388 images) identified four other observations, from Thailand, China and Malaysia, of the species feeding on snails. This suggests that the observation is not an isolated event. The snails were of different sizes, suggesting that a variety of snail species may be fed on.

In addition, a number of images in the Macaulay Library (2024) were of Pin-tailed Parrotfinches perched on vegetation or rocks in streams or at the water's edge – what we previously considered as a bathing or drinking activity should now be reconsidered as also a feeding activity. The Tawny-breasted Parrotfinch *Erythrura hyperythra* has also been imaged at similar streams (Zaiton Yunus 2010) but with no food seen in the beak; in light of this observation more information is required about their feeding in streams.

What the Pin-tailed Parrotfinches are feeding on in the snails is not certain. The snails are not crushed for their contents. The videos in this observation confirm the energetic probing of snails with tongues. However, no snail meat can be seen to be extracted. Possibly what is being extracted is liquid only - likely body fluids, nutrients from the fluid in the shell, including blood. Probing is done with the bill held open, so how is sucking done? Could the fluids be draining down into the lower mandible and then taken in? In one video a bird picks up a shell that has been fed on by another bird and discards it as 'empty'; suggesting an ability to discern that useful contents had been extracted.

An online search for images of the Pin-tailed Parrotfinch showed one image of a female feeding on a dragonfly larva at the water's edge (Fuangnakhon 2022).

A review of other parrotfinch species in the world, using the Birds of the World website, does not show any species feeding on snails, although some are noted to feed on insects.

We hope this observation encourages more detailed observation of the diet and feeding behaviour of Parrotfinches.

References

1. Parrotfinch species in *Birds of the World*. [online] <https://birdsoftheworld.org/bow/home> Accessed on 24 August 2024.
2. Fuangnakhon, S. (2022). Pin-tailed Parrotfinch *Erythrura prasina* Stock Photo ID 2241219417. *Shutterstock*. [online] <https://www.shutterstock.com/image-photo/pintailed-parrotfinch-erythrura-prasina-female-walks-2241219417> Accessed on 24 August 2024.
3. Macaulay Library. (2004). Pin-tailed Parrotfinch *Erythrura prasina*. *Cornell Lab of Ornithology*. [online]. Accessed on 24 August 2024.
4. Zaiton Yunus. (2010). Tawny-breasted Parrotfinch. *Borneo Bird Images*. [online] <https://www.borneobirdimages.com/species/tawny-breasted-parrotfinch> Accessed on 24 August 2024. There are four images of birds at a stream but no food in the beak.