The first ringing record of Sedge Warbler
*Acrocephalus schoenobaenus* in Japan

Masahiko TANAKA and Katsura MIKAMI

A Sedge Warbler *Acrocephalus schoenobaenus* was captured during a ringing survey in southwest Hokkaido on September 12, 2016. This is the first ringing record and the second national record of this species in Japan.

**Key words:** *Acrocephalus schoenobaenus*, Banding, Hokkaido, Ringing, Record, Sedge Warbler

The Sedge Warbler *Acrocephalus schoenobaenus* is a migratory member of the family Acrocephalidae (Clements *et al.* 2016; Gill & Donsker 2016). This species has a wide distribution and is a monotypic taxon; it breeds from Western Europe to central Russia (west of the Yenisei River) and central Asia including Kazakhstan, and winters in sub-Saharan Africa (Kennerley & Pearson 2010). Its status is considered by IUCN to be of “least concern” (BirdLife International 2004). East Asia, including Japan, lies far to the east of its normal distribution and its migration route. However, on rare occasions, juvenile songbirds of many species are known to migrate well beyond their normal ranges in their first Autumn *(e.g. Furuuchi *et al.* 2010, Horimoto & Watabe 2014)*.

We captured a single Sedge Warbler during a ringing survey in the Autumn migration season of 2016. This represents the first time that this species has been caught and the second time the species has been recorded in Japan – the first individual was photographed on the island of Tsushima, in western Japan, in September 2012 (Shoushima *et al.* 2013).

1. Details of the individual caught
   Sedge Warbler *Acrocephalus schoenobaenus*
   Age: Juvenile
   Sex: unknown

2. Observers
   Masahiko TANAKA
   Katsura MIKAMI

3. Ring Number
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4. Date, Site, and Ringing Method

The Sedge Warbler was captured on September 12, 2016 in Nanae on the Ohno Plain, Hokkaido, Japan at 41.9106 N, 140.6687 E (WGS84). The vegetation at the site consists of tall grasses (around 2 m), mostly *Phragmites australis*, surrounding rice fields. We have conducted ringing surveys at this site for many years. Surveys have been carried out during the early morning from March to November each year. Thirty-one mist nets (mesh size: 36 mm or 30 mm, height: 2 m, length: 12 m) were set at the site on the day on which the individual was caught, while the song of Middendorff’s Grasshopper Warbler *Locustella ochotensis* was being used to attract birds to the nets.

5. Morphological details

The focal individual had a conspicuous pale supercilium (Fig. 1a), a darkly streaked crown with a faint central crown-stripe (Fig. 1a, 1b), and faint, dark spots on the lower throat (Fig. 1c). The edge of the darkish streaks on the crown looked like lines above the supercilium. The mantle and back were warm olive-brown, while the rump was rufous brown (Fig. 1b, 1d, 1e). The mantle was fairly darkly streaked, but the rump, upper tail coverts, and upper central rectrices were not (Fig. 1b, 1e). The tip of the tail was slightly rounded (Fig. 1d and see measurements below). The upperwing secondary coverts and tertials had dark centers with buffish-brown fringes (Fig. 1a, 1d, 1e). The longest primary was the third, counting from the outermost (Fig. 1e; p (3) > P (2) > P (4) > P (5) > P (6) > P (7) > P (8) > P (9)), and primary projection, which is the projection of the primaries beyond the tertials at rest, was 76.4% of the length of the exposed longest tertials (Fig. 1a, 1b, 1d). The primary projection included eight primaries.

The tarsi were yellowish grey (Fig. 1f). The Skull ossification (SO) score (Svensson 1992) was “B.”

6. Morphometric measurements

The warbler’s measurements were as follows: total length: 122 mm, natural wing length: 66.5 mm, central tail feathers: 47 mm, outermost tail feathers: 42 mm, tarsus length: 21.4 mm, and exposed culmen: 9.9 mm, weight: 9.4 g.

7. Species Identification

We first compared the trapped individual with the two species that are most commonly encountered at the study site, Middendorff’s Grasshopper Warbler and the Black-browed Reed Warbler *Acrocephalus bistrigiceps*. Middendorff’s Grasshopper Warbler (the song of which we broadcast as a means of attracting birds for our ringing study) is larger, with a total length of 140–150 mm (Kennerley & Pearson 2010) and with a more rounded tip to the tail than the focal individual. Moreover, Middendorff’s Grasshopper Warbler has neither dark streaks on the crown, nor a clear supercilium (Kennerley & Pearson 2010). Although some juvenile of hybrids type of Middendorff’s x Pallas’s Grasshopper Warblers have streaks on both the back and breast (Kennerley & Pearson 2010), their size and bill resemble Middendorff’s closely (such a bird was caught at this site on September 29, 2016, unpublished
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Fig. 1. The Sedge Warbler caught in Nanae, Hokkaido, Japan on September 12, 2016.
Black-browed Reed Warblers were caught simultaneously close to where this individual was observed/caught. The body size (total length 120 mm) of the Black-browed Reed Warbler is similar to the focal individual. However, the former differs from the focal individual in the following plumage characteristics: the crown lacks speckles, pale supercilium are conspicuous, there are bold blackish stripes along the side of crown, the upperparts are drab and unmarked (Kennerley & Pearson 2010), and there are no speckled on the throat regardless of age.

We subsequently also referred to the somewhat similar Pallas’s Grasshopper Warbler Locustella certhiola, which is a Far-Eastern Locustella species. However, in comparison with the Sedge Warbler, that species has a narrower supercilium, a greater difference in lengths between the outer and central tail feathers, white tipped tail feathers (T2–T6), and dark spots on the rusty-colored rump (Svensson 1992).

Based on the focal individual’s tail shape and head shape, we compared it with the four morphologically similar species referred to in the study by Svensson et al. (1999): Sedge Warbler, Aquatic Warbler A. paludicola, Moustached Warbler A. melanopogon, and Speckled Reed Warbler (Streaked Reed Warbler) A. sorghophilus. The characteristics of the wings of the four species are summarized in Table 1 based on Kennerley & Pearson (2010). The number in brackets following P indicates the ascendant number of each primary beginning with the outermost. We were unable to compare wing length owing to different measurement methods, but have described them help in order to help in identifying species.

The plumage of the Aquatic Warbler is a more yellowish brownish (like ground) color than that of the focal individual. The plumage shows pale lores, a broad, pale central crown stripe, and heavily streaked pointed tail feathers (Kennerley & Pearson 2010; van Duivendijk 2011). Moreover, the streaks on the back of the focal individual were less obvious than those of in the Aquatic Warbler, and the rump was less speckled. The Moustached Warbler, particularly the Eastern race A. m. mimicus, which is duller or greyer than nominate A. m. melanopogon, is also similar to the Sedge Warbler (Kennerley & Pearson 2010). However, it has no pale central crown stripe, and it has clearer, more well-marked eye-stripes and moustachial-stripes (Williamson 1976; van Duivendijk 2011). The lores and ear-coverts of the Moustached Warbler are dusky whereas those of Sedge Warbler are mainly yellowish-brown (Williamson

<table>
<thead>
<tr>
<th>Species</th>
<th>Longest primary</th>
<th>Maximum wing length</th>
<th>Primary projection</th>
<th>No. of visible primary tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedge Warbler</td>
<td>P(3)</td>
<td>63–71 mm</td>
<td>80%</td>
<td>8</td>
</tr>
<tr>
<td>Aquatic Warbler</td>
<td>P(3)</td>
<td>60–66 mm</td>
<td>60–70%</td>
<td>7–8</td>
</tr>
<tr>
<td>Moustached Warbler*</td>
<td>P(4)</td>
<td>57–67 mm</td>
<td>50%</td>
<td>6</td>
</tr>
<tr>
<td>Speckled Reed Warbler</td>
<td>P(4)</td>
<td>57–59 mm</td>
<td>50%</td>
<td>5 or 6</td>
</tr>
<tr>
<td>Black-browed Reed Warbler</td>
<td>P(3,4)</td>
<td>51–60 mm</td>
<td>60–70%</td>
<td>6 or 7</td>
</tr>
<tr>
<td>The focal individual</td>
<td>P(3)</td>
<td>66.5 mm**</td>
<td>76.4%</td>
<td>8</td>
</tr>
</tbody>
</table>

*A. m. mimicus. The nominate subspecies has shorter wing than mimicus.

**: natural wing length
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1976. The upperparts of *A. m. mimicus* are olive-brown and its crown is brown (Kennerley & Pearson 2010), and the longest primary is either P6 or P7 (Kennerley & Pearson 2010, Svensson 1992). Although, the primary projection of *A. m. mimicus* is longer than in Western races (*melanopogon* and *albiventris*), it is still shorter than Sedge Warbler (Harris *et al.* 1996; Kennerley & Pearson 2010). The Speckled Reed Warbler also closely resembles Sedge Warbler. However, the two species are readily separated based on measurements and wing structure. According to Kennerley & Pearson (2010), Speckled Reed Warbler has noticeably shorter wings (55–59 mm) than Sedge Warbler (62–72 mm), and its longest primary is the fourth outermost. The primary projection beyond the longest tertial typically includes six widely visible primaries (Hong Kong Bird Watching Society 1992). Both Speckled and Moustached warblers have short, rounded wings, and their P(2)s are either equal to, or shorter than, P(6) or P(7) (Kennerley & Pearson 2010).

Tarsus length, tail length, and weight of the captured individual were within the normal range for Sedge Warblers (Svensson 1992; Kennerley & Pearson 2010). Furthermore, various characteristics of the individual captured such as speckles on the throat (Fig. 1c), a pale yellowish breast and belly (Fig. 1c), fresh remiges (Fig. 1d), a dark grey upper mandible, and a pink lower mandible (Fig. 1a.), were all consistent with those of juvenile Sedge Warblers (Svensson 1992, Svensson *et al.* 1999).

8. Behaviour

When the mist nets were checked at AM 05:30, the focal individual moved from short grasses to tall grasses, and then flew into the lowest rack of the mist net. The bird was trapped alone, while several Black-browed Reed Warblers were found in other nets nearby.

9. Previous Japanese record

The first national record of a Sedge Warbler was of an individual bird photographed in pre-harvested rice *Oryza sativa* fields on Tsushima, Nagasaki Prefecture, on September 1, 2012 (Shoushima *et al.* 2013). The habitat at our ringing site consisted of tall reeds of the species *Phragmites australis*. These reeds were coincidentally in the vicinity of rice fields, some of which were fallow and some of which were ready for harvest.

10. Further Information

Japan is located far to the East of the breeding and wintering areas and migration routes of the Sedge Warbler (Kennerley & Pearson 2010), making its appearance in Hokkaido exceptional. However, there are known instances of various other European-African migratory species, such as the Wood Warbler *Phylloscopus sibilatrix* (Shigeta & Ozaki 1999), and the Red-backed Shrike *Lanius collurio*, (Fruichi *et al.*, 2010, Horimoto & Watabe 2014) reaching Japan during Autumn. Such records may relate to juveniles in their first Autumn that have mistakenly migrated in the wrong direction (sometimes called reverse migration), or having been diverted due powerful weather events (reviewed in Newton 2010). Interestingly, although there have been no records of Sedge Warblers from the Russian Far East as far
as we are aware of, there is an Alaskan record of one of these birds photographed on September 30, 2007 (Pranty et al. 2008) providing further suggestion that Western species do occasionally stray eastwards in Autumn, mirroring cases of Central and East Asian migrant birds reaching Western Europe.

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References


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要 約

スゲヨシキリの日本初放鳥記録

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2016年9月12日, 北海道亀田郡七飯町藤城にてスゲヨシキリ Acrocephalus schoenobaenus 1羽が捕獲された。本種の標識記録としては日本で初めて, 確認記録としては日本で2例目である。環境は休耕田で, コヨシキリの群れと行動をともにしていた。当該個体は標識・計測を行った後, 性不明幼鳥として放鳥した。

キーワード：スゲヨシキリ, 北海道, 七飯町, 標識初記録。

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