

the latter. The birds looked much like *C. corone corone*, but with a brownish neck and nape. The voice was a "kaah", different from that of *C. corone* and *C. frugilegus*, but was only heard a few times. The voice was also very different from that of *C. corax*. The birds were feeding undisturbed on the garbage, and only flew a few times, very low, from one garbage-dump to another. I am familiar with *C. ruficollis* from Tunisia, Sinai and Israel, so that the possibility of any misidentification can be ruled out.

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## On the occurrence of the Bittern, *Botaurus stellaris*, in Turkey

by Max Kasperek

**Keywords:** Ardeidae — Middle East — Turkey — zoogeography

### 1. Introduction

The Bittern is distributed over nearly the whole Palearctic. However, many former breeding areas have been abandoned. The Bittern is a highly endangered species. The whole of Turkey was regarded as a breeding area of the Bittern by VOOUS (1962). This was criticized by KUMERLOEVE (1962): "That is apparently out of question, as only very few records of visitors have been announced". Recently, Bird Report (1976-81) has described the situation in Turkey as "very local resident in very small numbers in the Kızılırmak Delta, perhaps elsewhere."

It is the intention of this article to list all records from published and unpublished sources, and discuss the species' breeding and wintering status.

## 2. The records

### Marmara Region

For the Greek side of the Meriç (Ewros) Delta, BAUER & MÜLLER (1969) report five booming males in mid May 1955. In the following years the Bittern is stated to have been only a not uncommon winter visitor in the area, but 6 - 8 males were heard again in 1973 (BAUER in: CRAMP 1977). WARNCKE (1968) observed one flying Bittern on the Turkish side of the delta on 29.3.67.

C. J. BIBBY (in: Bird Report 1968-69) recorded one bird at a small reedy area in mid-Thrace on 19.8.68.

The Bittern is mentioned as a migrant in the İstanbul area by several authors. RIGLER (1852) included this species in his list of the birds of İstanbul (see also REISER 1904), ELWES & BUCKLEY (1870) noted "found near Constantinople" and ALLÉON (1880) "répandue en hiver". According to KRÜPER & HARTLAUB (1875), ROBSON found the species in the İstanbul area, too. MATHEY-DUPRAZ (1923) heard one booming in the İstanbul area on 10.5.1892 and saw one flying at nearly the same locality in March of the following year. He heard from hunters, that the Bittern is common in autumn, especially at Büyük Çekmece and Küçük Çekmece. MATHEY-DUPRAZ saw one on the market of Beyoğlu (Pera) on 16.11.1893 and three birds, two males and one female, in the museum of the American College (Robert College) in İstanbul. The latter individuals had been collected at Küçük Çekmece on 17.1.1914. All three skins are still available there (KASPAREK). WAHBY (1930) listed the species for 1919. In recent years, there are only two records: KUMERLOEVE (1970) mentioned one for Büyük Çekmece on 22.3.67 and U. GLIMMERVEEN & H. HOLS saw one bird near Ormanlı, at Terkoz Gölü, on 23.4.81.

K. BREEK & H. GELDERBLUM recorded one at Çınarcık near Yalova, on the Bay of İzmit, on 12.5.75.

A rather good number of records comes from the south of the Marmara Sea. Two breeding pairs have been listed for the Kuşçenneti National Park (ANONYMOUS 1976) which is a statement apparently based on information by T. GÜRPINAR. Recently, the Bittern was again listed among the breeding species of the National Park (ANONYMOUS 1986). According to the wardens, the species is present "especially during autumn" (KASPAREK). Two stuffed individuals at the museum there are without doubt from the surroundings of the park like all birds exhibited at that place. One individual was recorded by PANS (1974) on 4.6.74. It is not clear, whether the bird was seen at Manyas Gölü or at Apolyont Gölü which was visited on the same day. The same inaccuracy of locality is true for a bird recorded by WINGSPAN Tours on

15.9.82. The locality was again one of the two lakes. KASPARYAN (1960) observed one Bittern, one at Karadere, west of Karacabey, in the first half of August 1955 and one was seen at Manyas Gölü on 6.4.67 (Bird Report 1966-67) and on 30.4.71 (R. W. FORRESTER & R. A. JEFFREY in Bird Report 1970-73). D. S. FLUMM recorded one at that place on 15/16.1.72 and on 25.3.72 (Bird Report 1970-73). One individual on 25.3.83, seen by A. NOESKE, is the most recent record there.

At Apolyont Gölü, L. J. DIJKSEN & F. KONING observed two on 20.1.73 (cf. also Bird Report 1970-73), J. K. R. MELROSE one on 23.9.75 and C. IAPICHINO (in: Bird Report 1976-81) one on 19.9.80.

MULDER observed the species at a marsh near Erdek on the Marmara coast on 8.5.73 (fide LOTERIJMAN TE WINSCHOTEN). Apparently in the same area, northwest of Bandirma, L. J. DIJKSEN & G. PRINS recorded one on 16.4.80.

### Aegean Region

The first to mention the species for this region was STRICKLAND (1836). He only gave "Smyrna" (İzmir) as a finding place without details on date. KRÜPER hunted several in the İzmir area during winter 1870/71 (KRÜPER & HARTLAUB 1875). One female which was collected by him at İzmir on 15.1.1872 came into the collection of DRESSER (DRESSER 1875). In recent years, the species was only recorded once: L. J. DIJKSEN & F. KONING saw one at the Büyük Menderes Delta on 17/18.1.73 (see also Bird Report 1970-73).

### Mediterranean Region

BLOMFIELD-SMITH (1966) observed the Bittern on the Mediterranean coast. Unfortunately, she did not give details on locality and date. E. WOLLIN et al. saw six birds at a pond east of Alanya on 6.5.68. In 1969 and 1975, the species was not seen at this locality (EGGERS & STREESE 1978). However, U. v. WICHT & G. KNÖTZSCH saw one individual close to the beach of Alanya on 16.4.73. East of Antalya, at the mouth of Köprü Çayı, near Serik, S. COX saw one again on 3.4.78 (see also Bird Report 1976-81). N. KOCH saw one freshly shot on the market of Antalya at the end of December 1971.

At the Göksu Delta, S. BEUTLEY (in: Bird Report 1970-73) recorded one on 7.8.70. N. KOCH et al. saw one on 9.5.78 (south shore of Akgöl), on 5.4.84, and on 17.4.81 (Paradeniz Gölü), M. KUHN one on 20.4.80, and U. GLIMMERVEEN & H. HOLS one on 6.6.81. H. JACOBY, R. JÜRGENS et al. observed three on the westside of Akgöl on 3.1 and one on 4.1.84, N. HÖLZEL



one on the eastside of Akgöl on 23.3.84 and C. A. BREWSTER one on 9.4.85. H. EBENHÖH, H. JACOBY, N. KOCH et al. found two dead individuals on 31.3.80.

J. R. HOPKINS recorded one near Erdemli on 25.3.72 (Bird Report 1970-73). E. HERRLINGER & M. V. TSCHIRNHAUS found the remains of a decayed individual at a marsh near Osmaniye on 3.3.65 (see also KUMERLOEVE 1970). One was recorded at Amık Gölü on 2.4.67 and H. VIERHAUS & A. BRUCH observed one near Tarsus on 7.4.67 (KUMERLOEVE 1970).

### Inner Anatolian Region

KUMERLÖWE & NIETHAMMER (1935) saw one flying over the university campus of Ankara, at that time in the suburbs of the town, on 25.4.1933. WADLEY (1951) saw a pair at Ankara on 6.1.1944. The female of this pair was shot by hunters on 28.1.44. Wing-length of this bird was published as 205 mm which is apparently wrong, as minimum values are around 300 mm. According to LAMBERT (1946), the Bittern is a winter visitor in the Ankara district. One was seen at the Esenboğa airport north of Ankara in May 1966 and a total of six singles in addition to those listed below were recorded at various places in Inner Anatolia in January and February of 1968 and 1969 (Bird Report 1968-69). At Mogan Gölü, south of Ankara, A. VITTERY (in: Bird Report 1966-67) saw one on 25.2.69, J. R. TAYLOR (in: Bird Report 1974-75) one on 6.4.74, and J. L. D. CRAMB (in: Bird Report 1974-75) one in April and one on 31.10.75.

At Akgöl near Ereğli, K.-H. PÖLLET & P. ZACH heard and saw two individuals on 9.5.82. This seems to be the only record during the breeding season; L. J. DIJKSEN & F. KONING saw one in that area on 24.11.70 and on 12.1.72 (see also Bird Report 1970-73) and A. MÜLLER, R. SCHÜTT et al. saw one there and found one decayed (apparently shot) on 28.12.82. H. JACOBY & A. MÜLLER recorded one individual on 29.12.81, H. JACOBY & R. JÜRGENS one on 27.12 and two on 28.12.83, and H. JACOBY one on 27.12.85. At Hotamış Gölü, CH. MURPHY heard three booming males on 31.5.83. L. J. DIJKSEN & F. KONING recorded six birds there on 8/9.1.73 (see also Bird Report 1970-73) and H. H. HOEKSTRA & F. KONING saw one bird on the way from Hotamış to Konya on 17.1.69.

In the Sultan Marshes, south of Kayseri, the Bittern apparently was seen by T. GÜRPINAR before 1977, as he has included the species in an unpublished check-list of the birds of the area. R. AKÇAKAYA & C. BILGIN saw one between 24 and 27.5.78. In 1982, two decayed individuals, apparently shot, were found near Ovaçiftlik on 14.3 (R. AKÇAKAYA, C. BILGIN & M.

KASPAREK), and one on Çorakada on 7.6 (E. BEZZEL, CH. HUSBAND & M. KASPAREK). In the marsh north of Ovaçiftlik, one was seen on 14.3 (R. AKÇAKAYA, C. BILGIN & M. KASPAREK), 11.4 (M. KASPAREK) and 12.4 (M. KASPAREK). These records have been summarized by KASPAREK (1985).

WADLEY (1951) heard one booming in the Sakarya valley west of Polatlı in March of about 1944. M. J. INGRAM (in: Bird Report 1970-73) recorded one individual at Balıkdarnı in the Sıvrıhisar area on 1.10.72. At Çavuşçu Gölü, H. H. HOEKSTRA & F. KONING observed one on 12.1.69. At Eber Gölü, the species was recorded in the 1966-67 period (Bird Report 1966-67). L. J. DIJKSEN & F. KONING saw one at Akşehir Gölü on 28.11.71 (see also Bird Report 1970-73). At Tuz Gölü, N. KOCH heard one on 3.5.75.

### Black Sea Region

A concentration of records occurs at the Kızılırmak Delta where Balık Gölü and Uzun Göl is situated. One booming male was heard there on 11.7.66 (Bird Report 1966-67) and three booming males heard and two flying birds seen at the south edge of Balık Gölü on 7 and 8.6.69, and three more booming males at the north edge of Balık Gölü on 9.6.69 (B. A. E. MARR & R. PORTER, see also Bird Report 1968-69). 2-3 were calling on 30.4.70 (M. J. HELPS & N. A. G. LORD in: Bird Report 1970-73). In 1971, two individuals were heard daily between 7 July and 6 August (RENKHOFF 1972, Bird Report 1970-73). At least three males calling on 10.6.75 (R. PORTER & I. WILLIS), one recorded on 27/28.5.79 (N. KOCH et al.) and calls heard on 5.7.83 (N. KOCH). In 1984, one was booming at Uzungöl on 17 and 18.6 and one or two heard plus one seen at Balık Gölü on 17.6. (E. BEZZEL). Winter records at the Kızılırmak Delta are: three on 26.1.70, one on 1.1.71, and two on 4/5.1.73 (all by L. J. DIJKSEN & F. KONING). The records at the Kızılırmak Delta have been summarized by DIJKSEN & KASPAREK (1985).

At the Yeşilırmak Delta near Terme, M. AKBULUT (in: KUMERLOEVE 1967) shot one in March 1964. H. VÖLZ heard one booming several times there between 22 and 26.5.84 and saw one flying on 25.5.84.

ABBOTT (1834) mentioned the Bittern from a collection from Trabzon and SMITH (1960) found the species again there in 1958: two individuals on 12.9 and one on 15.9.

At Yenicağa Gölü in the Bolu province, M. KASPAREK, N. KOCH & A. KILIÇ saw one individual on 6.9.84.

### South-east Anatolian Region

KUMERLOEVE (1961) procured one specimen from Barak (Kargamış) at

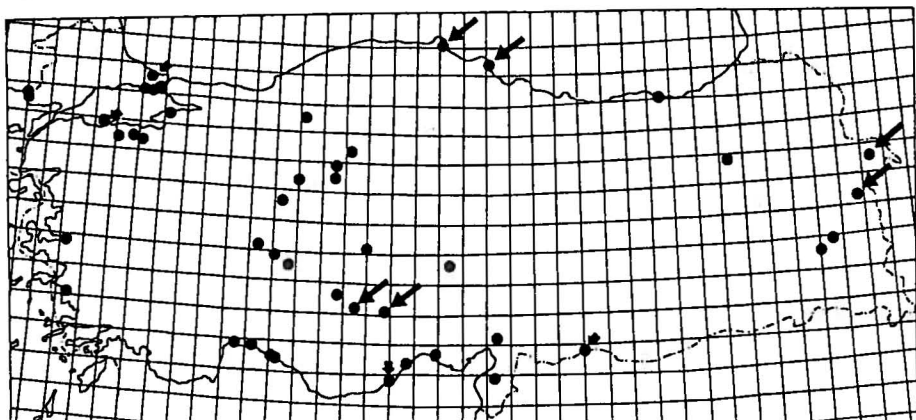


Fig. 1. Distribution map of the Bittern, *Botaurus stellaris*, in Turkey. All records without respect to season or year are shown. Localities where booming males have been heard during the last decade are indicated by a big arrow. Other possible breeding sites in the same period (cf. text) are marked with a small arrow.

the Syrian border on 31.12.51 (wing-length 334 mm). The locality was first published as Gaziantep, but was later corrected (KUMERLOEVE 1967, 1970). At the same locality, a group of Swiss bird-watchers (ALA) saw one on 13.4.82 and H. EBENHÖH one on the next day.

#### East Anatolian Region

CALVERT (in: CURZON 1854) included the Bittern in his list of the birds of Erzurum. In the marshes near Van, G. E. DOBBS & M. G. HODGSON recorded one on 7.8.71 (see also Bird Report 1970-73) and P. THOMSEN & P. JACOBSEN (in: Bird Report 1974-75) saw one on the southern shore of this lake on 20.5.75. One male was booming in a marsh near Çaldıran, northeast of Van Gölü, on 25.6 and on 1.7.85 (CH. HUSBAND et al.).

K. WARNCKE heard one booming during the day and night at the marsh north of Doğubeyazıt at the foot of Ararat Mountain (Ağrı Dağı) on 15 and 16.6.73 (Bird Report 1970-73). Again at this site, R. JÜRGENS heard one on 16.6.86.



### 3. Discussion

Most of the records of the Bittern in Turkey are from April. Then the number of records continuously declines until the end of the year, but reaches a new maximum in January. Between January and April the number of records falls again. This gap is apparently due to the extremely low activity of bird-watchers in Turkey during February to mid March.

A rather high proportion of the records listed above concern dead birds, some freshly shot. All these are from December to March (plus one found decayed in June), which is during the hunting season. However, the Bittern is known to suffer from hard winters, too.

At present, no details on breeding sites are known. During the last decade, booming males have been heard at Akgöl/Ereğli and at Hotamış Gölü in Inner Anatolia, at the Kızılırmak Delta and the Yeşilirmak Delta on the Black Sea coast, and near Çaldıran and near Doğubeyazıt in Eastern Anatolia. In addition to these sites, sight records during the breeding season have come from Terkoz Gölü in the İstanbul area (April), Erdek near Bandırma (April), the Göksu Delta (April, May, and June) and from Kargamış at the Syrian border (April). Although breeding has never been proved for Turkey, these localities have to be treated as breeding sites or at least as possible breeding sites of the Bittern.

There are too few records to enable discussion of population development. New sites have been discovered in recent times. The winter records in the İstanbul and İzmir areas during the last century (the only places where regular observations were made at that time), suggest that the population was larger at that time.

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