

Although not uncommon in some localities, this small frugivore faces serious difficulties from the rapid loss (largely to beachfront housing) of its coastal forest and restinga habitat in south-east Brazil, where its seasonal movements require fuller study and understanding.

DISTRIBUTION The Black-backed Tanager (see Remarks 1) is endemic to the coastal Atlantic Forest region of south-east Brazil, with records from Rio de Janeiro, São Paulo, Paraná and Santa Catarina (see Remarks 2). Its occurrence further to the north in Espírito Santo (Ruschi 1953), although admitted by Meyer de Schauensee (1966, 1982), has not been accepted by subsequent authorities (e.g. Sick 1985, Isler and Isler 1987, Ridgely and Tudor 1989) and is also discounted here. In the following account, records are given within states from north to south (east to west in Rio de Janeiro) with coordinates from Paynter and Traylor (1991) unless otherwise stated.

Rio de Janeiro Records are from: rio Mocotó, near Campos, July 1987; Desengano State Park at ribeirão Vermelho, 650 m, August 1987 (J. F. Pacheco *in litt.* 1987); Ilha de Santana (off Macaé), June 1984 and April 1986 (V. S. Alves *in litt.* 1987); Ilha do Cabo Frio, recently (J. B. Nacinovic verbally 1990; specimens in MNRJ); Saquarema, August 1953 (Mitchell 1957); Fazenda Boa Vista, Carmo, August 1988 (J. F. Pacheco verbally 1988); Maricá restinga (near Zacarias), regularly in winter (from June to August) since 1983 to at least 1990 (F. S. Porto verbally 1984, J. F. Pacheco *in litt.* 1986, C. E. Carvalho *in litt.* 1987, G. D. A. Castiglioni verbally 1990); Itaboraí, July 1961 (Aguirre and Aldrichi 1987); Porto das Caixas (Descourtilz 1854-1856); Inhaúma, 25°50'S 43°20'W (Descourtilz 1854-1956); Tijuca National Park above Alto da Boa Vista, July 1979 (A. Greensmith *per* D. Willis *in litt.* 1988); Rio Botanical Garden, July 1988 (B. C. Forrester *in litt.* 1988); Sernambetiba, 23°02'S 43°29'W, August 1946, September 1947 (Novaes 1950); Sepetiba ("Sapitiba"), 22°58'S 43°42'W (von Pelzeln 1868-1871).

São Paulo Records (see Remarks 3, 4) are from: Mato Dentro (von Pelzeln 1868-1871); Itatiba, September 1907 (Hellmayr 1936, Pinto 1944); Cantareira, a northern suburb of São Paulo, March 1976 (specimen in CIAL); Boracéia, 23°39'S 45°54'W, May 1964 and April 1966 (specimens in ANSP and MZUSP); Ipiranga, a suburb of São Paulo, undated (von Ihering and von Ihering 1907); São Sebastião, October 1902 (specimen in AMNH); Santos, August 1902 (von Ihering and von Ihering 1907, Pinto 1944); Itararé, June 1903 (von Ihering and von Ihering 1907, Pinto 1944); Peruíbe, February, April, May and September 1991 (D. F. Stotz *in litt.* 1991); Barra do rio das Corujas, 24°09'S 47°39'W, November and December 1964; Barra do ribeirão Onça Parda, 24°19'S 47°51'W, November 1964; Onça Parda (untraced), October 1962; rio Ipiranga, 24°22'S 47°50'W, September and October 1962; Primeiro Morro (left bank of rio Ipiranga), July and September 1961; Morretinho (untraced), September 1961; Barra do rio Ribeira (rio Ribeira de Iguape, 24°40'S 47°29'W), July 1964; Serra da Juréia (untraced: presumably in or near the present-day Juréia Ecological Station), July 1966; Barra do Icapara (Icapara), August 1966 (specimens from the preceding nine localities in MZUSP); Iguape (in one case precisely Baicô), January and February 1898 (von Ihering 1898, von Ihering and von Ihering 1907, Pinto 1944), July 1969 (specimens in MZUSP), July 1977 (specimens in CIAL), undated (specimen in MNRJ), and recently (D. F. Stotz *in litt.* 1991); Ilha Comprida, January and April 1988 (D. F. Stotz *in litt.* 1991); Ilha da Cananéia (in one case precisely Tabatinguara), September 1934 (Pinto 1944), January and April 1988; on the mainland opposite Ilha da Cananéia, June 1991 (D. F. Stotz *in litt.* 1991); Ilha do Cardoso State Park, recently (D. F. Stotz *in litt.* 1988, 1991, P. Martuscelli *in litt.* 1991).

Paraná Although several of the descriptions of the species's range (e.g. Meyer de Schauensee 1982, Isler and Isler 1987, Ridgely and Tudor 1989) indicate its extension from Rio de Janeiro to Santa Catarina, and Scherer Neto (1985) noted that this bird was known in Paraná from references in the literature, material in museums and his own observations, there appear to be no records in this state (see Remarks 5) before those from: Fazenda Santa Rita, Palmeira, regularly since 1984 (L. dos Anjos *in litt.* 1987 and verbally 1992, F. C. Straube *in litt.* 1987); Ilha do Mel, June 1986 (A. de Meijer *in litt.* 1987); São Mateus do Sul, April 1986 (F. C. Straube *in litt.* 1987).

Santa Catarina The only certain localities still seem to be those recorded by Hellmayr (1936) and repeated by Pinto (1944), based on specimens from Joinville (e.g. May 1930; in MCZ), Blumenau and Araranguá. Sick *et al.* (1981) indicated that there are records for the state in the literature, material in

museums and their own field observations, but it is evident that they considered the Black-backed and the Chestnut-backed Tanager *Tangara preciosa* together (see Remarks 1).

POPULATION The species is generally considered not rare, with periodic local fluctuations in numbers due to seasonal movements at least in Rio de Janeiro and São Paulo, which provide the bulk of records. There are no unequivocal records from Santa Catarina since the 1930s; but it is apparently neither rare nor seasonal in Paraná (L. dos Anjos *in litt.* 1987, F. C. Straube *in litt.* 1987). At Ilha do Cardoso it is fairly common, but numbers decline dramatically in the winter; it is uncommon on Ilha da Cananéia and Ilha Comprida, fairly common at Peruíbe; further north in São Paulo it appears to be much rarer; the habitat around Iguape, where a large series was obtained in the 1960s and early 1970s (see Distribution), is mostly intact, but it is doubtful whether the species still occurs inland in this state, except perhaps in the rio Ribeira de Iguape valley, or in winter in small numbers (D. F. Stotz *in litt.* 1988, 1991). In Rio de Janeiro the species appears only in winter months, when it has been recorded regularly mainly along the state's south-eastern coast, from Rio de Janeiro to Cabo Frio (see Distribution).

ECOLOGY The Black-backed Tanager seems to be largely confined to lowland forests and restinga (littoral scrub) along the coast. Most modern records in Rio de Janeiro are from restinga, but the species has also been recorded from the Paraíba do Sul river valley in a fruiting tree at the edge of secondary forest, with other local winter visitors such as Fawn-breasted Tanager *Pipraeidea melanonota* and Yellow-legged Thrush *Platycichla flavipes* (J. F. Pacheco verbally 1988), and at up to 650 m in secondary forest at Desengano State Park (J. F. Pacheco *in litt.* 1987). Recent records in São Paulo have been exclusively from coastal sand-plain forests, i.e. restinga in its wider sense (D. F. Stotz *in litt.* 1988, 1991, P. Martuscelli *in litt.* 1991), and the habitat in which birds have been collected on the southern coast of the state has been recorded as “primitive forest”, “interior of primitive forest”, “old secondary forest” and “young secondary forest” (specimens in MZUSP). In this region the species does not go into the “true” forests at all, and has not been seen on any of the mountain slopes; but on Ilha da Cananéia and Ilha Comprida it occurs in fairly disturbed habitat as well as undisturbed forest (D. F. Stotz *in litt.* 1988, 1991).

Birds have been recorded singly, in pairs (Descourtilz 1854-1956, specimens in MZUSP) or in flocks with other species (P. Martuscelli *in litt.* 1991). Seasonal displacements occur (see Population), with birds appearing in the vicinity of Rio at the beginning of the cold season, when the aroeira *Schinus* fruits were ripe, and disappearing after the winter months of May to July (Descourtilz 1854-1956). There is no information on breeding.

THREATS Deforestation on the lower slopes of the Serra do Mar has been regarded as a probable threat to the species (Ridgely and Tudor 1989) and, given its decided preference for the coastal restinga vegetation, one of the most restricted and threatened habitats in south-eastern Brazil (LPG), this concern seems fully justified. Destruction of the restinga in São Paulo for beachfront housing has been described as “almost unbelievable”: from Santos south to Peruíbe, an area which four years before had development just around the towns of Mongaguá and Itanhaém, there is now a nearly continuous strip of development on the beach side of the highway, and it has now started on the inland side (D. F. Stotz *in litt.* 1991). Real-estate development is massive also on Ilha Comprida (C. Yamashita *in litt.* 1991), and deforestation has been considered a threat to the species also on Ilha do Cardoso (P. Martuscelli *in litt.* 1991). The main area of occurrence of the species in Rio de Janeiro is also a “prime holiday development” (D. Willis *in litt.* 1991) and is under no less pressure from real-estate onslaught (Gonzaga and Pacheco 1990). Very little habitat remains now where the species has been recorded in the vicinity of Rio city, and even this is disappearing (LPG).

The species occasionally appears in the illegal cagebird trade, both in São Paulo (P. Martuscelli *in litt.* 1991) and in Rio, where “one or two birds” are offered for sale from time to time (C. E. Carvalho *in litt.* 1987). A bird, seen in a cage in August 1953 at Saquarema, was said to have been caught locally (Mitchell 1957). Trade of the species seems to represent a minor, if any, threat at this stage, but it could compound problems in the future with continuing habitat loss.

MEASURES TAKEN Small portions of the species's limited range in Rio de Janeiro are included in the Jacarepiá and Maçambaba State Reserves and the Maçambaba and Maricá Environmental Protection Area near Arraial do Cabo (IEF/FEEMA/INEPAC 1991); however, these areas apparently lack any effective control (LPG). Access to Ilha do Cabo Frio is restricted and controlled by the Brazilian navy, which keeps a lighthouse there. In São Paulo the species's possible occurrence in the Juréia Ecological Station may give it some protection but, to judge from the situation described in Threats, the Cananéia–Iguape–Peruíbe Environmental Protection Area (see CONSEMA 1985) seems to be ineffective to protect the species's habitat. The Ilha do Cardoso State Park may provide some additional security, although appropriate habitat there is somewhat limited and it, too, is inadequately protected (see Threats).

MEASURES PROPOSED Surveys of the species in the field are needed to obtain a fuller understanding of its seasonal movements, which is probably crucial to its long-term conservation. However, enforcement of existing legislation concerning the protection of coastal areas in Rio de Janeiro and São Paulo is clearly imperative. These areas are of singular importance for at least two other endemic threatened birds, the Restinga Antwren *Formicivora littoralis* and the Red-tailed Amazon *Amazona brasiliensis* (see relevant accounts).

REMARKS (1) Following a suggestion by Hellmayr (1936), Sick (1985) judged this bird to form a single polymorphic species with the Chestnut-backed Tanager, but elsewhere they have been and remain treated as distinct, partially sympatric species (Pinto 1944, Meyer de Schauensee 1966, 1982, Isler and Isler 1987, Ridgely and Tudor 1989, Sibley and Monroe 1990, Willis and Oniki 1991). (2) Its occurrence in Misiones and Buenos Aires, Argentina, has been mentioned as accidental (Dabbene 1913, Hellmayr 1936), but these records obviously refer to the Chestnut-backed Tanager (see Isler and Isler 1987, Narosky and Yzurieta 1987, Ridgely and Tudor 1989). Likewise, a record from Pelotas, Rio Grande do Sul, has been discredited (von Ihering 1899b, Hellmayr 1936). (3) Hellmayr (1936) reinterpreted the record “Rio Claro, Goyaz” (Sclater 1886) as indicating the locality in São Paulo, and not the river in Goiás, “where no representative of this group is found”. Another old record which would represent a locality very much inland than any of other records is “Rio Paraná” (von Pelzeln 1868-1871), probably now the town of União, 19°59'S 47°46'W (Paynter and Traylor 1991); Pinto (1944) did not consider either of these localities. (4) E. O. Willis *in litt.* (1986) mentioned this species from eight unspecified localities in the state. (5) Von Pelzeln (1868-1871) listed Jaguariaíva as the source of a specimen from Paraná, but Hellmayr (1936), who examined the material in question, apparently considered the bird involved was a Chestnut-backed Tanager.