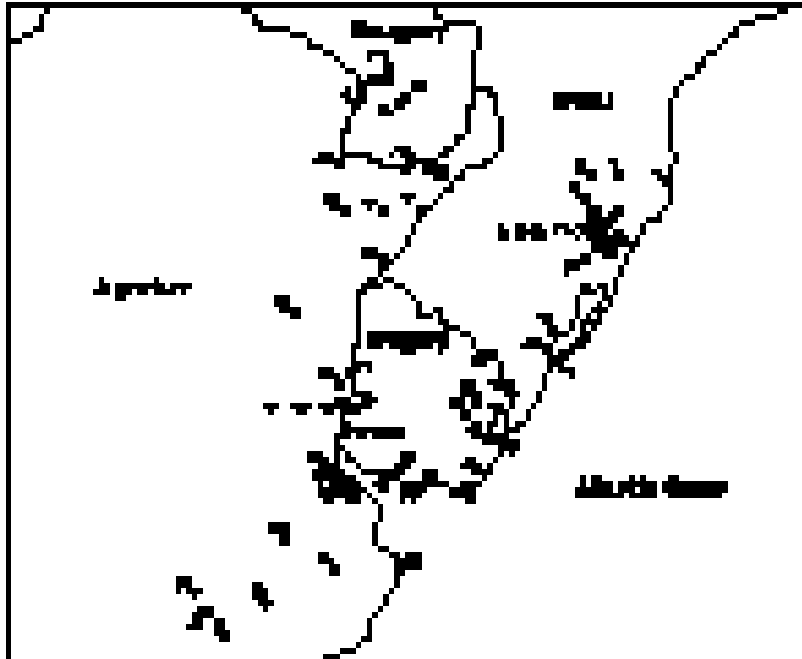


Many different uses of the open country in which this colonial icterid lives are responsible for its steep decline and loss of range in Brazil, Paraguay, Uruguay and Argentina, where it occurs in very few protected areas and is in urgent need of study and survey.

DISTRIBUTION The Saffron-cowled Blackbird occurs in south-eastern Brazil, eastern Paraguay, Uruguay and north-eastern Argentina (Meyer de Schauensee 1966, Ridgely and Tudor 1989). Unless otherwise indicated, in the following account records with dates at individual localities are of single birds collected or observed, with coordinates taken from Paynter (1985, 1989), Paynter and Traylor (1991) and Rand and Paynter (1981).



Brazil Records (north to south) include:

(*Santa Catarina*)
c.10 km south of Otacílio Costa¹, December 1986 (D. F. Stotz *in litt.* 1991); Anita Garibaldi², November 1969 (specimen in MNRJ); Parque Estadual da Serra do Tabuleiro³ (27°50'S 48°47'W), July 1982 (a few birds observed: M. A. de Andrade *in litt.* 1988); on the border with Rio Grande do Sul, between Bom Jesus and São Joaquim⁴, where a flock of six birds was observed (Silva and Fallavena 1988);

(*Rio Grande do Sul*)
unspecified, May 1882 (two specimens in MNRJ); between Esmeralda and Muitos

Capões⁵, where a flock of 24 birds was observed in May-June 1988 (Silva and Fallavena 1988); Vaccaria⁶ (= Vacaria), December 1928 (six specimens in AMNH) and December 1974 (specimen in MNRJ); south of Vacaria, December 1986 (D. F. Stotz *in litt.* 1991); between Vacaria and Bom Jesus⁷, where flocks of 6-8 birds were observed in August 1988 (Silva and Fallavena 1988); 35 km south of Vacaria⁸, where a nest was found in November 1971 (Belton 1984-1985); Bom Jesus⁹, January 1990 (Pacheco and da Fonseca 1990); Boa Vista¹⁰, Cambará do Sul, where a flock of 11 birds was observed in November 1991 (F. Silva *in litt.* 1992); and a flock of six birds in March 1992 (M. Pearman *in litt.* 1992); Lajeado Grande¹¹, January and November 1960 (five specimens in MCN and MZUSP); between Cambará do Sul and Tainhas¹², where flocks of 8-11 birds were observed in May-June 1988 (Silva and Fallavena 1988); Itaimbezinho area¹³ (within Aparados da Serra National Park: see Paynter 1985), currently (Ridgely and Tudor 1989, B. M. Whitney *in litt.* 1991); 11 km north-east of Tainhas¹⁴, September 1970 (specimen in MCN); Várzea do Cedro¹⁵, where two flocks of 5-8 birds were observed in August 1988 (Silva and Fallavena 1988); Saiqui¹⁶ (29°19'S 50°46'W), where nesting activity was detected in November 1972 (Belton 1984-1985); Canela¹⁷, undated (specimen in MNRJ); between Tainhas and São Francisco de Paula¹⁸, where several five flocks of 5-10 birds were observed in May-June 1988 (Silva and Fallavena 1988); near São Francisco de Paula¹⁹, where two flocks of 15-20 birds were observed in February 1980 (M. Nores *in litt.* 1992); 9 km north-east of São Francisco de Paula, December 1986 (four specimens in FMNH); Barragem Blang (untraced but near São Francisco de Paula, September 1958 (specimen in MCN); near Rincão dos Kroeff²⁰ (29°27'S 50°25'W), December 1970 (specimen in MCN); Novo Hamburgo²¹, July 1896 (von Ihering and von Ihering 1907, Pinto 1944; see Remarks); Pelotas²², undated (two birds taken: Hellmayr 1937, Pinto 1944); Rio Grande²³, 1853 (two specimens in AMNH and BMNH); Campo da Boa Vista (untraced, undated: von Ihering 1899a); between Pelotas and Rio Grande, recently (TAP).

Paraguay Records (north to south) are: (*Presidente Hayes*) “bajo chaco”²⁴, undated (J. Escobar *in litt.* 1991); (*La Cordillera*) “Cordillera”²⁵ (Bertoni 1939); (*Guairá*) Villa Rica (= Villarrica), November 1905 (three specimens in BMNH); Caravení (untraced), Villarrica²⁶, August 1924 (specimen in BMNH); Itapé²⁷ (25°51’S 56°38’W), October 1927 (two specimens in FMNH); (*Alto Paraná*) Itakyry, Itaipú reservoir, March 1987 (N. Pérez *in litt.* 1992); (*Itapúa*) 10 km west of San Cosme y Damián²⁸ (c.27°15’S 56°19’W read from DSGM 1988), March 1989 (five birds observed: F. E. Hayes *in litt.* 1991).

Uruguay Records (roughly north to south) are: (*Paysandú*) “Paysandú”²⁹, October 1883 (specimen in AMNH); (*Río Negro*) Estancia Bopicuá³⁰ (Bopicuá at c.33°06’S 58°01’W), April 1974 (a flock observed: Gore and Gepp 1978); Fray Bentos³¹, November 1967 (a flock of 8-10 birds: Gore and Gepp 1978); southern Río Negro department³², where according to Alvarez (1933) the species was more commonly found; (*Cerro Largo*) San Diego³³ (c.31°55’S 53°58’W), río Yaguarón, April 1960 (specimen in MNHNM); Ruta (untraced), July 1958 (specimen in MNHNM); (*Treinta y Tres*) Bañados del Este³⁴, currently (*World Birdwatch* 12,1-2 [1990]: 4), e.g. flock of 20, May 1992 at Los Indios (R. Vaz-Ferreira verbally 1992); marsh near Quebrada de los Cuervos³⁵ (c.32°54’S 54°25’W), December 1986 (two birds observed: Arballo 1990); arroyo Avestruz³⁶ (= arroyo Avestruz Grande, at 33°12’S 54°41’W), May 1953 (specimen in MNHNM); Campos de Oscar Pérez (untraced), Río Olimar, August 1958 (specimen in MNHNM); (*Soriano*) c.3 km south-west of Dolores³⁷, June 1927 (specimen in FMNH); La Concordia³⁸ (= Colonia La Concordia), at 33°37’S 58°20’W), July and August 1958 (three specimens in MNHNM); (*Rocha*) between Cebollatí and Lascano³⁹, August 1972, April (six birds observed) and May 1973 (12 birds observed: Gore and Gepp 1978); Arrocería Bonino (untraced), Lascano, undated (specimen in MNHNM); 22 km south-east of Lascano⁴⁰, May 1963 (two specimens in AMNH); Bañados de India Muerta⁴¹ (= Bañado de San Miguel, at 33°48’S 53°42’W), where two flocks of 32 and 28 individuals were observed in October and December 1987 respectively (Arballo 1990); marsh near Rocha⁴², where a flock of 40 individuals was observed in December 1988 (Arballo 1990); (*Colonia*) “Colonia, Río de la Plata”, August 1871 (specimen in BMNH); (*San José*) Arazatí⁴³ (probably Bañados de Arazatí, at c.34°35’S 57°00’W), August 1956 (specimen in MNHNM); (*Maldonado*) “Maldonado”⁴⁴, 1826, January 1837 and December 1866 (three specimens in BMNH, MNHN, UMZC); (*Montevideo*) “Montevideo”⁴⁵, undated and 1827 (two specimens in BMNH and MNHN); Bañados de Carrasco⁴⁶ (34°50’S 56°03’W), November 1909 (two specimens in MNHNM).

Argentina Records (north to south) are:

(*Formosa*) eastern Formosa (Olrog 1979); Monte Lindo⁴⁷ (= Colonia Dalmacia, 25°51’S 57°54’W), November 1944 (Esteban 1953a);

(*Chaco*) unspecified (Freiberg 1943, Ridgely and Tudor 1989); eastern Chaco (Meyer de Schauensee 1966);

(*Misiones*) unspecified (SOMA 1935-1942, Freiberg 1943, Pereyra 1950, Olrog 1979, but based presumably on a female collected in the province and deposited in MACN in March 1932: see Chebez *in press*); río Paraná⁴⁸, Posadas, February 1983 (Chebez *in press*);

(*Corrientes*) San Cosme⁴⁹ (27°22’S 58°31’W), where two birds were collected in November 1947 (Esteban 1953a); Estero Batel⁵⁰ (= Esteros del Batel, 28°30’S 58°20’W, in OG 1968), October 1974 (two birds observed: P. Canevari *in litt.* 1987); 18 km north and 4 km west of Santo Tomé⁵¹, Esteros de Iberá, May 1989 (M. Pearman *in litt.* 1990); c.10 km west of Ruta 14⁵² (Santo Tomé–Posadas) on the road to Colonia Carlos Pellegrini (28°32’S 57°10’W), where c.105-135 birds arrived to roost in mid-May 1991 (F. R. Lambert verbally 1992); on the way to Paso de los Libres⁵³, September 1978 (a flock of c.20 birds) (see Klimaitis 1986);

(*Santa Fe*) arroyo Miní (untraced), April 1937 (Freiberg 1943);

(*Entre Ríos*) unspecified (specimen in MNRJ); “Entreríos” (date not given) (specimen in BMNH); Santa Elena⁵⁴ (30°57’S 59°48’W), where two nests were found in November 1923 (Smyth 1927-1928); 18 km south of Caseros⁵⁵, December 1983 (a flock of c.40 birds) (Klimaitis 1986); Concepción del Uruguay⁵⁶, October and November (Barrows 1883; two specimens in MCZ); km 75 (National Road 14), Gualguaychú Department, November 1990 (Chebez *in press*); arroyo Gualayán⁵⁷ (32°58’S 58°31’W in OG 1968), at its intersection with National Road 14, 1989 (Chebez *in press*); Estancia San Luis⁵⁸ (33°00’S

58°28'W), where more than 50 birds were observed in January and 16 in March 1992 (E. I. Abadie, B. M. López Lanús and M. Pearman *in litt.* 1992); Puerto Boca⁵⁹ (33°03'S 58°23'W), where five birds were observed in October 1987, while in January 1990 two flocks of c.25 and c.15 birds were observed as well as a pair carrying food, in December 1991 two flocks of 30 and c.10 birds, and on different occasions during January 1992 one to five birds (coordinates and data from E. I. Abadie, B. M. López Lanús and M. Pearman *in litt.* 1992);

(Buenos Aires) Zelaya⁶⁰ (34°21'S 58°52'W), nesting in 1932 (Pereyra 1933); Ribera Norte⁶¹, San Isidro, nesting in 1983, 1984, and 1985 (see Chebez *in press*); Barracas al Sur⁶² (= Barracas, 34°39'S 58°22'W) (Dabbene 1910); Lomas de Zamora⁶³ (34°46'S 58°24'W), where two birds were collected on an ungiven date (Withington and Sclater 1888); Conchitas⁶⁴ (= Guillermo E. Hudson, at 34°47'S 58°10'W), April, August and September 1868 (10 specimens in AMNH, BMNH and USNM; also Sclater and Salvin 1868-1869); Adrogué⁶⁵ (34°48'S 58°24'W), January 1881 (White 1882); Alvear⁶⁶ (= General Alvear), September 1876 (Durnford 1878); río Vecino⁶⁷ (presumably Canal Número Uno, at 36°40'S 58°35'W; see Paynter 1985), no date given (see Hellmayr 1937); Cabo San Antonio⁶⁸, where the species was observed on different occasions (Gibson 1885, 1918); between Lavalle⁶⁹ (= General Lavalle) and Carhué (37°11'S 62°44'W) (see Hellmayr 1937); Pigué⁷⁰ (37°37'S 62°25'W), March 1881 (large flocks observed: Barrows 1883); Sierra de la Ventana⁷¹, which appears to be the southernmost record, although the species no longer occurs there (Fraga 1990); Santa Elena⁷² (untraced, but in the north-west of the province), April 1894 (two specimens in BMNH); La Rosa (untraced), April 1886 (specimen in BMNH).

POPULATION The Saffron-cowled Blackbird has become very rare in Argentina, Paraguay and Uruguay, and appears to have diminished seriously since the 1970s in Brazil (Silva and Fallavena 1988, W. Belton *in litt.* 1990).

Brazil The late nineteenth-century literature does not help judge whether the species has diminished or remained stable over the years. In this century it has been considered uncommon in its range (Belton 1984-1985, Sick 1985), although more recently reported to be locally common in Rio Grande do Sul and southern Santa Catarina (W. Belton *in litt.* 1986, D. F. Stotz *in litt.* 1988). After a couple of visits to Rio Grande do Sul around 1986, W. Belton (*in litt.* 1990) noted that the species was scarcer when compared to the 1970s. This decline was corroborated by Silva and Fallavena (1988), who between July 1987 and September 1988 conducted field searches in north-east Rio Grande do Sul and adjacent Santa Catarina: they visited a total of 96 suitable sites, but the species was only present in 17 of them; furthermore, most flocks observed comprised a few individuals and only on one occasion was a flock of as many as 24 birds recorded (see Distribution). Set against the evidence from the 1970s and early 1980s, such as records of "10 to 50 individuals, with occasional bands of 100 or more" (Belton 1984-1985), Silva and Fallavena (1988) interpreted their findings as indicating a recent decline in numbers. Yearly visits to 6-7 colonies between São Francisco de Paula and Itaimbezinho canyon (Aparados da Serra National Park) between 1980 and 1991 resulted in an approximate total of 230 birds, with no noticeable decline in numbers but evidence of cowbird parasitism since 1988; moreover, searches for the species in central and western Rio Grande do Sul during a c.1,500 km drive through grasslands and farmlands in May 1992 were entirely unsuccessful (TAP).

Paraguay The species's status in Paraguay is far from clear, but the few comments found in the literature suggest that it was common at the end of the nineteenth and in the early twentieth centuries: Burmeister (1856) reported it "very common" and de Azara (1802-1805) stated that it was abundant, adding that sometimes it was seen in large flocks. The scarcity of records in recent times (see Distribution) suggests that the species is now very rare.

Uruguay Published evidence suggests that the species was common during the nineteenth century. C. Darwin found large flocks and considered it to be common (Gould 1841), and Gibson (1885) reported it to be "abundant" in the Department of Paysandú. However, Alvarez (1933) noted that the species "is not very abundant" and that it was mainly to be found in the southern parts of Río Negro, while Gore and Gepp (1978) considered it scarce in various parts of the country.

Argentina The species was perhaps never very common (Fraga 1990; also M. I. Christie *in litt.* 1986). Durnford (1878), who collected a bird at Alvear, Buenos Aires, considered it then to be “rare”, although Barrows (1883) reported the occurrence of a large flock (“a hundred or more” birds) at Pigué, Buenos Aires, in March 1881. The species was “common” at Santa Elena, Buenos Aires, in April 1894 (BMNH label data). Comments in Sclater and Hudson (1888-1889) and Hudson (1920) suggest that the species was common in the province of Buenos Aires, where flocks of 20-30 birds were reported. After 1882, however, flocks were no longer seen in eastern Buenos Aires, and the southernmost population, in the Sierra de la Ventana, vanished soon after European settlement towards 1900 (Fraga 1990). Pereyra (1933) considered it fairly scarce. Today the species is very rare in the country and declining in most parts (Klimaitis 1984, 1986, Narosky and Yzurieta 1987, Ridgely and Tudor 1989, Fraga 1990; also M. I. Christie *in litt.* 1986, P. Canevari *in litt.* 1987); however, birds are occasionally recorded in southern Misiones, Corrientes, Formosa, Entre Ríos and north-eastern Buenos Aires (J. C. Chebez *in litt.* 1991). The species is still locally common in eastern Corrientes and eastern Entre Ríos, where recent sightings included flocks of more than 50 birds, with 105-135 birds at a roosting site (see Distribution).

ECOLOGY The Saffron-cowled Blackbird has been reported from very different environments ranging from open grasslands, dry bushy areas, agricultural fields, rolling pasture and boggy swales characterized by the presence of *Eryngium* (a plant known as “cardales” in Argentina and “gravatá” in Brazil) (Alvarez 1933, Gore and Gepp 1978, Klimaitis 1984, 1986, Belton 1984-1985, Sick 1985, Ridgely and Tudor 1989, R. I. Orenstein *in litt.* 1991).

Little is known about its feeding requirements; foraging is done by colonies in flocks (TAP), and it has been observed following the plough and feeding on insects and worms (Hudson 1920); maggots have also been reported in its diet (Burmeister 1856). *Eryngium* appears to be of great importance for the species, not only for breeding (see below) but for providing food, since birds have been reported searching for prey items (e.g. locusts) within these clusters (Klimaitis 1986), although they also forage in adjacent grasslands (Ridgely and Tudor 1989).

The Saffron-cowled Blackbird breeds in colonies which are usually situated in patches of *Eryngium* or bushes (e.g. “sarandíes”) situated only about 0.3 to 1 m above ground, and have been reported both in dry areas (Gibson 1885, Pereyra 1938, Klimaitis 1986) and in typical upland swales (Brazil) or wet marshes with some standing open water in which *Eryngium* and woody vegetation is present (Barrows 1883, Belton 1984-1985, Ridgely and Tudor 1989). E. I. Abadie, B. M. López Lanús and M. Pearman (*in litt.* 1992) observed a presumed nesting pair in an area of dense marsh vegetation including *Eryngium* and *Acacia caven*. The breeding season starts in October, and most of the nests contain eggs or young by November (Gibson 1885, Smyth 1927-1928, Pereyra 1933, Belton 1984-1985) although, in a colony reported by Barrows (1883), eggs were laid about the third week of December.

The Saffron-cowled Blackbird is a highly sociable species; most records refer to flocks, these sometimes involving more than a hundred birds (Hudson 1920; see also Distribution). Birds are known to associate with other icterids, e.g. Brown-and-yellow Marshbird *Pseudoleistes virescens*, Yellow-rumped Marshbird *P. guirahuro*, Pampas Meadowlark *Sturnella militaris* (see relevant account) and Bay-winged Cowbird *Molothrus badius* (de Azara 1802-1805, Fraga 1990, J. Escobar *in litt.* 1991, F. E. Hayes *in litt.* 1991, E. I. Abadie, B. M. López Lanús and M. Pearman *in litt.* 1992, F. R. Lambert verbally 1992). The species has been reported roosting in large numbers (105-135) mixed with more than 250 Yellow-rumped Marshbirds in reed/long grass beds (F. R. Lambert verbally 1992). An interesting association with the near-threatened Black-and-white Monjita *Heteroxolmis dominicana* has been noted, in which flocks of the blackbird follow and perch around one or two monjitas (Belton 1984-1985, Ridgely and Tudor 1989). This interesting association may well be beneficial for both species, the foraging blackbirds disturbing insects that the monjitas then catch, the prominently perched monjitas serving as anti-predator vigilantes for the blackbirds (TAP). The blackbird's movements are poorly studied and, although it is not considered a migratory species, the data suggest a pattern of irregular eruptions (Fraga 1991), this also being suggested by unsuccessful searches of the species's usual haunts (suitable habitat and known sites throughout Rio Grande do Sul) conducted in late January 1992: such movements should be borne in mind when judging the species's status in a region (TAP).

THREATS The causes of the Saffron-cowled Blackbird's decline in some parts of its range are not clear. According to J. C. Chebez (*in litt.* 1986), the decline in Argentina is related to man-transformed habitats

(i.e. expansion of agriculture and cattle-raising) and the associated use of pesticides. Burning of tall grasses in spring for tender pastures has also been indicated as a possible cause of decline in Argentina (M. Rumboll *in litt.* 1986). Extensive pine plantations within the species's range in Rio Grande do Sul are rapidly replacing natural grasslands (TAP). Silva and Fallavena (1988) identified the following threats (all derived from human activities) in apparently suitable habitat in which the species was not recorded during their study in north-eastern Rio Grande do Sul and adjacent Santa Catarina: fires, drainage, human settlements, agriculture and pesticides, cattle and hunting. In eastern Paraguay habitat destruction is probably the species's main threat (F. E. Hayes *in litt.* 1991). In the Bañados del Este, Uruguay, enforcement of existing laws are ignored and some areas have already gone because of draining and development (Scott and Carbonell 1986, *World Birdwatch* 12,1-2 [1990]: 4); the situation there continues to deteriorate and over 40% of the area has already been lost mainly because of rice plantations (P. Canevari *in litt.* 1992). Although not studied, brood-parasitism by Shiny Cowbirds *Molothrus bonariensis* could be an additional problem: Barrows (1883) reported that he found “many” Shiny Cowbird's eggs in Saffron-cowled Blackbird nests, something also recorded in Brazil several times since 1988 (TAP).

MEASURES TAKEN The species is protected under Brazilian law (Bernardes *et al.* 1990). It occurs in the Aparados da Serra National Park in Rio Grande do Sul and in the Bañados del Este Biosphere Reserve/Ramsar site (but see Threats). In Corrientes, Argentina, the species occurs in the Iberá Provincial Reserve (J. C. Chebez *in litt.* 1992).

MEASURES PROPOSED More distributional and ecological studies are required, to be undertaken year-round so as to determine all the species's needs and to avoid errors in population estimates resulting from any temporary displacements (see Ecology). This work should try to identify remaining breeding areas within the species's range and to ascertain the as yet little known causes of decline. The information derived from these surveys should be used to produce an international conservation strategy to be implemented in an action plan together with the near-threatened Black-and-white Monjita.

It is essential to recognize the great importance in the general area (south-eastern Brazil, southern Paraguay, Uruguay and north-eastern Argentina south to the province of Buenos Aires and Río Negro) of primary dry and wet grasslands and associated marshes, which constitute the main habitat of other partially sympatric threatened species, namely Strange-tailed Tyrant *Yetapa risora*, Pampas Meadowlark and Yellow Cardinal *Gubernatrix cristata*, and the near-threatened Black-and-White Monjita (for other important grassland species with a slightly different distribution, see the corresponding section under Strange-tailed Tyrant). Within this general zone, the Saffron-cowled Blackbird is known to occur sympatrically with the Black-and-White Monjita, Strange-tailed Tyrant, the threatened Rufous-rumped Seedeater *Sporophila hypochroma* (see relevant account) and Yellow Cardinal in the Esteros del Iberá in Corrientes, Argentina, while in the Bañados del Este, Uruguay, it overlaps with the Speckled Crake *Coturnicops notata* (see relevant account) and the near-threatened Straight-billed Reedhaunter *Limnornis rectirostris*, Black-and-White Monjita and Black-bellied Seedeater *Sporophila melanogaster*. Both areas deserve strong conservation management; in the latter, existing regulations should be adequately enforced (see Threats). Other areas where the Saffron-cowled Blackbird and the Black-and-white Monjita are both present but habitat remains unprotected are Puerto Boca in Entre Ríos, Argentina (for the importance of this site, see Measures Proposed under Entre Ríos Seedeater *S. zelichi*), and Itaimbezinho west of the Aparados da Serra National Park, Rio Grande do Sul, Brazil (see Distribution; material on the monjita held on the ICBP database).

REMARKS The labels of two specimens (in MZUSP) from “Novo Hamburgo” (as given in Pinto 1944) actually read: “Boavista Campo, 18 July 1896”, apparently Campo da Boa Vista, as in von Ihering (1899a).