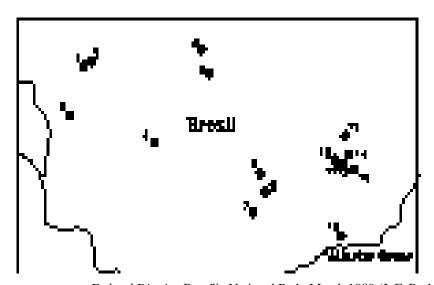
This cerrado emberizid occurs patchily and at inexplicably low density across central Brazil, and although recently found in three national parks it merits study to determine its true status and the causes of its rarity.

**DISTRIBUTION** The Cinereous Warbling-finch has been recorded from a remarkably large area of south-central Brazil (see map in Ridgely and Tudor 1989), being described as "a characteristic species peculiar to the highlands of inner Brazil" (Naumburg 1930). However, records are extremely scarce within this region, with just three localities in Mato Grosso (no record since 1904), one in Mato Grosso do Sul (in 1937), four in Goiás (two records since 1906), one recently from Distrito Federal, three in São Paulo (last record in 1901) and eight in Minas Gerais (four very recent). Burmeister's (1856) claimed sight-record for Nova Friburgo in Rio de Janeiro is not accepted here. Records may be arranged from west to east, as follows:

Mato Grosso Cuiabá<sup>1</sup>, July probably 1824 (von Pelzeln 1868-1871) and April or August 1882 (specimen in BMNH); Santa Anna da Chapada<sup>2</sup> (Hellmayr 1938), this locality being (a) the same as Chapada (Allen 1891-1893), for which there are two skins in AMNH dated August 1882, (b) presumably the same as "Santa Anna, near Cuiabá" (Naumburg 1930, based on an old skin in MNHN) and (c) now called Chapada dos Guimarães (Paynter and Traylor 1991); Porto Faia, November 1904 (von Ihering and von Ihering 1907, Pinto 1944; skin in MZUSP has "Fazenda Faya"), somewhere on the rio Paraná (see Paynter and Traylor 1991);



Mato Grosso do Sul Fazenda Recreio<sup>3</sup>, Coxim, August 1937 (Pinto 1944);

Goiás Emas National Park<sup>4</sup>, July 1988 (R. Byrne *per* B. C. Forrester *in litt*. 1992); rio Tesouras<sup>5</sup>, May 1906 (Hellmayr 1908, 1938); Goiás<sup>6</sup>, August 1823 (von Pelzeln 1868-1871, Hellmayr 1908, 1938), with this locality (unclear whether town or state is intended) also in March—May 1906 (Hellmayr 1908); Minaçu, October 1986 (R. B. Cavalcanti *in litt*. 1987);

Federal District Brasília National Park, March 1989 (J. F. Pacheco verbally 1992);

São Paulo Rincão<sup>7</sup>, February 1901 (von Ihering 1902, von Ihering and von Ihering 1907, Pinto 1944); rio das Pedras<sup>8</sup> (i.e. close to rio Grande at around 20°00'S 47°45'W: Paynter and Traylor 1991), April 1823 (von Pelzeln 1868-1871); rio Sapucaí<sup>9</sup> (probably on upper third: Paynter and Traylor 1991; i.e. at c.20°45'S 47°30'W), April 1823 (von Pelzeln 1868-1871);

Minas Gerais Sete Lagoas (Reinhardt 1870, Pinto 1952); Pedro Leopoldo (specifically Lapa Vermelha), November 1971 (specimen in DZMG); Parque das Mangabeiras, near Belo Horizonte, recently (A. Whittaker per B. C. Forrester in litt. 1992); Lagoa Santa (Burmeister 1856, Pinto 1952); Gouvea July 1990 (Forrester 1990); Serra do Cipó National Park July and October 1990 (Forrester 1990, R. S. Ridgely per B. C. Forrester in litt. 1992); Peti Reserve (c.19°52'S 43°20'W in Paynter and Traylor 1991), August 1990 (Forrester 1990; see Remarks); Vargem Alegre , where breeding was apparently recorded, 1900 (von Ihering 1902, von Ihering and von Ihering 1907, Pinto 1944, 1952).

**POPULATION** Ridgely and Tudor's (1989) expression of concern that the species had "gone virtually unrecorded in recent years" came just as it began to be found in the areas east of Belo Horizonte, but their conclusion that the bird is "inexplicably scarce and local" still seems valid. The number of encounters in recent years give some cause for hope that it is faring better than had been thought, but the numbers

encountered remain small, from which it appears that the density is very low.

**ECOLOGY** Habitat is stated to be fairly open deciduous woodland and cerrado, mostly at 600-1,200 m (Ridgely and Tudor 1989), but it is not clear if this is based on assumption or recent unpublished evidence. Birds were in pairs on low grassland trees near gallery forest along the rio Sapucaí in April 1823, when a young female was collected; seeds were in the stomach of this or another bird taken there (von Pelzeln 1868-1871). In 1900 von Ihering (1902) was sent two eggs from Vargem Grande, Minas Gerais, but there was no indication of time of year nor whether they formed part of a clutch or a complete clutch, or indeed came from separate nests. A specimen from "Minas Gerais" (in DZMG) had testes developed in November. A female from Goiás, May, was in moult, and another from the same month and state was juvenile (skins in AMNH).

**THREATS** Ridgely and Tudor (1989) referred to this species's "present rarity", finding this difficult to explain through loss of some of its cerrado habitat to agriculture. However, the evidence seems to indicate that this has always been a very scarce bird, doubtless being rendered the more so by conversion of habitat.

**MEASURES TAKEN** The species is protected under Brazilian law (Bernardes *et al.* 1990). Recent records from Emas National Park in Goiás, Brasília National Park in the Federal District and Serra do Cipó National Park in Minas Gerais, plus that from the Peti Reserve (see Remarks), gives some hope that some populations of this rare bird obtain some security from the Brazilian protected areas system.

**MEASURES PROPOSED** Searches are needed in the remoter regions of the range states to rediscover this elusive creature and make some effort to plot its distribution. Populations in the three main protected areas mentioned above require careful evaluation. The species should be targeted for study to determine the likely causes of its scarcity.

**REMARKS** What is here called the "Peti Reserve" is "Reserva Natural Parque do Peti" in Paynter and Traylor (1991) and "Estação Ambiental de Peti" according to B. C. Forrester (*in litt*. 1992); the legal status and effective protection of the site remains unclear.