

FALCO KREYENBORGI—A CURRENT REVIEW

by
Clifford M. Anderson
1623 6th Street West
Kirkland, Washington 98033

and

David H. Ellis
Institute for Raptor Studies
Box 4420, OM Star Rt.
Oracle, Arizona 85623

Falco kreyenborgi is perhaps the rarest and certainly the least known of the ten or so “great” falcons (Johnson 1972). It inhabits the Patagonian region of South America and is currently recognized from only five collected specimens (Hickey 1969) and several sight records. The general ecology of the species is unknown (Olrog 1968) and its nest and breeding behavior remain undescribed with two exceptions; a few fragmentary comments on the original nest and the alleged finding of a pair with one recently fledged young by Carlos Kovaks in Chubut, Argentina in 1975 (W.G. Vasina in letter to C.M. White, 1981). The following summarizes the information presently available on *Falco kreyenborgi*.

Specimens and Photographs (see Table 1)

The first specimen of *kreyenborgi*, a recently fledged male, was captured at its eyrie in southern Chile in 1925 (Dementiev 1965). The exact location of the site was kept secret, but was allegedly located in the vicinity of Punta Arenas, Chile. The circumstances surrounding the event are unclear. Stresemann and Amadon (1963) wrote:

“Professor C. C. Olrog, Instituto Lillo, Tucumán, Argentina, tells us that he met certain otter hunters who said they had personally taken the falcons from an eyrie on a small rocky island south of Tierra Del Fuego . . .”

However, in a letter written to Anderson (6 January 1979) Olrog amended this as follows:

“The people I inquired did not say where the birds came from; besides I had the feeling they did not want to tell, and talking to the cook on board, I got the impression that the chicks did not at all come from ‘some small island’ but from Seno Skyring [northwest of Punta Arenas] where at that time there was a coal mine . . . It seems likely that the locality was invented.”

Kleinschmidt (1937) was told that the nest was inaccessible at times because of heavy snows and that it was on a “hillside cliff.”

The original falcon was sold to M. Carlos Strauss, a German living in Punta Arenas

who acquired and sold animals to zoos in Europe. While still in immature plumage, the falcon was transported to the Zoological Garden in Münster, Germany. It died in October 1932 and became the type specimen of *Falco kreyenborgi* (Dementiev 1965).

Stresemann and Amadon (1963) imply that the three falcons were taken from the same eyrie at one time. However, Dementiev (1965) reported:

“At a later date, sadly unknown, two other eyass falcons [a male and a female] had been captured from the same nest as the previous bird . . . They also arrived at the zoological garden at Münster, attained an adult stage and died” (translation).

The time-lag accounts for the type specimen being placed in a different museum (Bonn, Germany) than the other two (Münster, Germany). It is not known how long an interval separated the arrival of these birds in Münster, it may have been months or years, although each of the birds attained adult plumage before death. Kleinschmidt (1937) noted that all three falcons were sent to Germany by Strauss.

Sometime between 1925 and 1929 a German falconer, Herr-Doctor Kreyenborg, brought the original specimen to the attention of Dr. Otto Kleinschmidt, who examined it while still alive at the Münster zoo. Kleinschmidt recognized it as a new species and named it in honor of Dr. Kreyenborg (Kleinschmidt 1929, 1937).

In 1937, in his second article, Kleinschmidt described an unsuccessful breeding attempt involving *Falco kreyenborgi*. Dementiev (1965) summarized the results:

“Kleinschmidt (1937) has published the fact that the male *kreyenborgi* in the Münster zoo was paired with a female of *Falco peregrinus cassini* which laid an egg. The details remain unfortunately unknown . . .” (translation).

Kleinschmidt (1937) noted that the male “sat on the eggs while the female . . . was sickly” (translation). This is one of the first recorded instances of falcons attempting to breed in captivity. A photograph of the type specimen of *Falco kreyenborgi* was also published in the 1937 article.

Later, Kleinschmidt (1939) referred to the new species as *Falco peregrinus kreyenborgi*. This change in systematics reflects Kleinschmidt's well known penchant for linking various related forms into “Artenkreise.” He also included a color plate of *kreyenborgi* consisting of a ventral photograph of a dead adult with outstretched wings. It was presumably one of the Münster zoo falcons.

Nothing more was learned about the species until 7 April 1940, when Olrog (1948) collected a fourth specimen, an immature male, at Estancia Viamonte on the Argentine side of Isla Grande. Prior to this, it was speculated that the Münster falcons might have been an aberrant family group (Kleinschmidt 1937) or originated from a different location than South America. Kleinschmidt (1929) himself had originally thought that they might have come from Africa. Therefore, the collection of another specimen by Olrog from the same general location as the original birds was significant (Stresemann and Amadon 1963). Olrog (1948) included dorsal and ventral photographs of the bird after preparation as a museum skin.

The next reference to *kreyenborgi* was again provided by Kleinschmidt (1958). In the revised third edition of a book on the hawks and owls of Germany, he included a color plate of paintings showing 22 geographical representatives from the Peregrine Falcon species group. Among the illustrated examples is an adult *kreyenborgi*.

On 15 August 1961, Károly Kovaks collected the fifth specimen of *kreyenborgi* in an agricultural area approximately 5 km north of El Bolson, Rio Negro province, Argentina (Kovaks 1962–3). A publication included front and rear photos of the mounted specimen. This record extended the range of the species considerably even though it was an immature bird (Brown and Amadon 1968). Zsolt Kovaks allegedly found a sixth specimen in Chubut province during the mid-1970s but it was too decomposed to be prepared (Csaba Kovaks-pers. comm.). At present, we know nothing more of this particular bird.

The color plate of adult and immature *kreyenborgi* in Brown and Amadon (1968) was based on the El Bolson specimen and one of the original adults, both borrowed by Amadon (pers. comm.). Another photograph of the head of the El Bolson falcon was included in a paper on Argentine Peregrines (Vasina 1975).

Until recently, there were no known photographs of a live specimen of *kreyenborgi*. On 10 March 1979, Ellis and Glinski (1980) took the first known photos of a wild bird (immature) on Isla Grande. In December 1979, T. Roundy took motion pictures of another *kreyenborgi* (age unknown) both perching and in flight. This film is currently in his possession (pers. comm.).

Sightings

The rarity of the species is demonstrated by the failure of several expeditions to even sight the bird. However, P. W. Reynolds stated that “passage birds” were seen quite frequently at Viamonte during the austral winter (Olrog 1948) and recorded seven sightings over one season while during the same period he had 20 Peregrine sightings (W. G. Vasina, lett. to C. M. White, 1981). All other recorded sightings of *kreyenborgi* are summarized below in chronological order.

1. 3 May 1975. M. Rumboll (Jehl and Rumboll 1976) sighted a single *kreyenborgi* “4 km north of Misión, near Rio Grande, Isla Grande” feeding on a large unidentified passerine “presumably *Pezites militaris*” (Military Starling). This is the first recorded prey item for *kreyenborgi*.

2. 11 May 1975. Rumboll (Jehl and Rumboll 1976) sighted another at “Estancia Condor, just north of the Straits of Magellan, and 200 km north of Misión.” He adds that the two sightings may have been of the same bird.

3. 10 March 1979. Ellis and R. Glinski (1980) observed an adult (probable female based on size) perched for two min. at a distance of 40 m and later seen flying on the northeastern coast of Isla Grande. It had a small passerine prey item (size class ca. 30 g).

4. 10 March 1979. Ellis and Glinski (1980) saw a juvenile (probably female based on size) as close as 12 m while it perched and fed on the carcass of a large gull (probable *Larus* sp.) about 30 km from the earlier sighting. This is the third recorded prey item for *kreyenborgi* and suggests that the falcon subsists primarily on birds.

5. 12 March 1979. Glinski (Ellis and Glinski 1980) sighted a falcon (probable female based on size) for 1–2 min. along the Atlantic coast less than 1 km from the 10 March adult sighting, likely the same bird.

6. 20 December 1979. T. Roundy observed a falcon for approximately 30 min. perched and flying over steppe habitat in the central region of Argentine Patagonia (pers. comm.).

Two additional 1980 sightings are described in another paper by the authors (Ellis and Anderson, *this issue*).

Taxonomy

At present, *Falco kreyenborgi* is considered to be a separate species. However, during the 55 years since the bird was first discovered, several opinions about its taxonomic position have been advanced. In the most complete review of the problem, Stresemann and Amadon (1963) support Kleinschmidt's original contention that *kreyenborgi* is indeed a separate species.

The main taxonomic confusion concerns the position of *kreyenborgi* within the genus *Falco* and its relationship to *Falco peregrinus*. Some authors (c.f. Peters 1931:290) considered the bird to be a questionable subspecies of the Peregrine, while Kovaks (1962-3) regarded it as most closely allied to the Gyrfalcon (*Falco rusticolus*) and Dementiev (1965) suggested that it was possibly a race of the desert falcon complex, *Falco pelegrinoides*. In fact, Kleinschmidt (1929) originally mistook the first specimen of *kreyenborgi* for a Barbary Falcon (*Falco pelegrinoides*). Stresemann and Amadon (1963) and Brown and Amadon (1968) also noted the similarity. The former authors consider that the absence of the typical adult Peregrine plumage ("color and pattern") probably removes *kreyenborgi* from *Falco peregrinus* and yet its basic morphology suggests that it belongs in the Peregrine group.

Since a Peregrine (*Falco peregrinus cassini*) inhabits the same general area as *kreyenborgi*, it is tempting to suggest that *kreyenborgi* might prove to be a member of the Saker-Gyrfalcon (*Falco cherrug-Falco rusticolus*) group, of which the nearest New World representative is the Prairie Falcon (*Falco mexicanus*). Minute examination of

Table 1. Specimen Data for *Falco kreyenborgi*

Characterization	Age/Sex	Date Collected	Locality	Collector	Present Location
Type Specimen	Adult Male	1925	Near Punta Arenas, Chile	Unknown	Alexander Koenig Museum, Bonn, Germany
"Münster" Specimen 1	Adult Male	192?	Near Punta Arenas, Chile	Unknown	As of January 1979, both were at the Museum für Naturkunde, Berlin, Germany.
"Münster" Specimen 2	Adult Female	192?	Near Punta Arenas, Chile	Unknown	Prof. L. Franzisket was arranging for their return to Münster (Westf. Landesmuseum für Naturkunde)
Viamonte Specimen	Immature Male	7 Apr 1940	Estancia Viamonte, Isla Grande, Argen.	C. C. Olrog	Royal Museum of Natural History (Riks Museum), Stockholm, Sweden
El Bolson Specimen	Immature Male	15 Aug 1961	El Bolson, Rio Negro, Argentina	Karoly Kovaks	Puerto Madryn, Chubut, Argentina*

*Reported to be in the possession of Carlos Kovaks, 1980.

four of the specimens by Stresemann and Amadon (1963) showed however that *kreyenborgi* belongs to the Peregrine group as demonstrated by the wing formula, wing shape, and the great length of the outer toe. Even more remarkably, it seems inseparable in size from *cassini* as judged admittedly from very few specimens of either species. Brown and Amadon (1968) conclude "it is impossible to be sure what this form is until more is known of it."

Common Name

"Kleinschmidt's Falcon" was first suggested as a common name for *Falco kreyenborgi* by Stresemann and Amadon (1963). It was subsequently used by Dementiev (1965), Johnson (1965), Brown and Amadon (1968), Walker, et al (1973), and Blake (1977). Grossman and Hamlet (1964) first used the names "Pallid or Tierra Del Fuego Falcon" followed by Humphrey, et al (1970), Jehl and Rumboll (1976), Gochfeld (1977), and Clements (1978).

In pursuit of uniformity in referring to this falcon, we suggest that the terms "Tierra Del Fuego Falcon" and "Kleinschmidt's Falcon" be suppressed since Kleinschmidt's contribution is cited in the full scientific name, *Falco kreyenborgi* Kleinschmidt, and to date not all of the specimens and sightings are from Tierra Del Fuego. Future research will show if the descriptive term "Pallid Falcon" or the less restrictive, locative term "Patagonian Falcon" best suits this elusive bird.

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ANNOUNCEMENT

QUEBEC RED-SHOULDERED STUDY

In the spring of 1980, the Macdonald Raptor Research Centre of McGill University initiated a Red-shouldered Hawk banding and marking project in the south-western region of Quebec to determine dispersion, migratory movements and recruitment.

Birds are being banded with red, white, blue and yellow (and combinations thereof) plastic bands and standard FWS bands. We would appreciate any sightings of these birds. Observers are asked to note the band colours and their relative positions on the legs, as well as the location of the sighting.

Please report this information along with your name, address and phone number to the Bird Banding Laboratory, Laurel, MD 20811 with a copy to BRENDA PENAK AND DAVID BIRD, Macdonald Raptor Research Centre, Macdonald Campus of McGill University, Ste. Anne de Bellevue, Quebec H9X 1C0