

## RANGE EXTENSION OF THE WHITE-THROATED HAWK (*Buteo albogula*) IN WESTERN PATAGONIA, CHILE

Extensión del rango de distribución del aguilucho chico (*Buteo albogula*) en la Patagonia Occidental, Chile

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**RESUMEN.-** Aquí documentamos cuatro nuevos registros del aguilucho chico (*Buteo albogula*) hechos entre 2006 y 2011 en la región de Aysén, Chile, los cuales extienden su límite de distribución austral > 450 km hacia el sur desde el último registro conocido. Monitoreos futuros son necesarios para confirmar si la distribución del éste aguilucho es más amplia y si se reproduce en la región de Aysén.

Understanding species distributions is helpful for implementing effective conservation plans; consequently, high efforts must be employed for defining the edge of species distributions by fieldwork or modeling in order to analyze and predict the responses of animal species to ecological changes and habitat shifts along gradients (Thiollay 1996). However, these field surveys may be very expensive and time-consuming. In such cases, databases of occasional records made during baseline studies or rapid ecological assessments offer an opportunity for gathering preliminary information on the distribution and habitat of rare, elusive or threatened species (Olupot & Sheil 2010).

The White-throated Hawk (*Buteo albogula* Philipp 1899) is a migratory South American forest raptor. Up to date, only two main distribution areas are known for the species: the southern temperate rainforest where it breeds, and the sub-tropical Andes forest where it winters (Gelain *et al.* 2001, Pavez 2000, Trejo *et al.* 2006, 2007). Up to now, the southernmost record in Chile is reported at La

Junta, northern Aysén (44°05' S, 72°17' W; Figueroa *et al.* 2002). Here, we documented new observations of White-throated Hawks in Aysén and that significantly extends its southern distributional range in Chile.

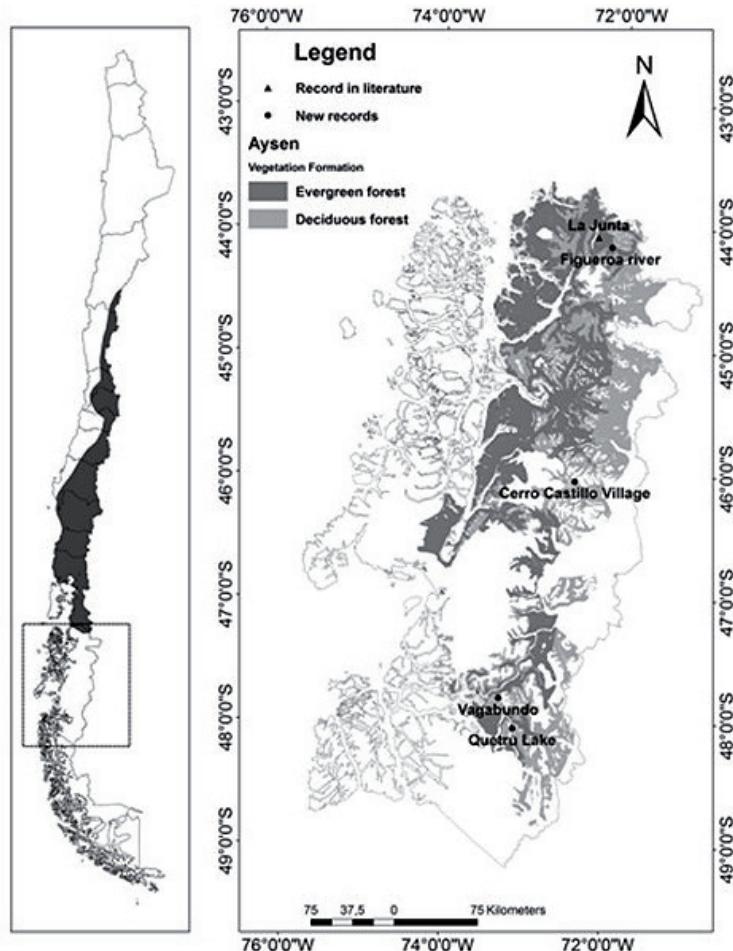
We recorded White-throated hawks occasionally by participating in two baseline studies of fauna between 2006 and 2008. White-throated hawks were observed in four localities (Fig. 1). On 16 October 2006 (austral spring), an adult White-throated Hawk was observed perching on a live Magellan southern beech (*Nothofagus betuloides*) near to Quetu Lake (48°05'05" S, 73°07'42" W). On 17 October 2006 an adult White-throated Hawk pair was observed flying over the forest in the Vagabundo locality (47°50'25" S, 73°18'21" W). On 9 February 2008 (austral summer) an adult White-throated Hawk was observed flying over the forest and perching on a live lenga (*Nothofagus pumilio*) on a tophill near Cerro Castillo village (46°04'57,4" S, 72°26'58,8" W; a photograph is available from authors). An additional record made during winter was communicated to us by a colleague (M. Esco-

bar, com. pers., 2011). On 24 July 2011, an adult White-throated Hawk was observed perching on a southern beech near the borderline of the Figueroa River ( $44^{\circ}09'50''$  S,  $72^{\circ}07'29''$  W). All record sites were characterized by rugged terrains composed of high hill (500–1500 m elevation) and flat areas in the valleys. In Quetu Lake, Vagabundo and Figueroa River, the most elevated hilltops and slopes (< 1000 m elevation) are covered by old shrub-sized (2–3 m tall) Magellan southern beech forests. The low slopes are covered by old-growth evergreen forests mainly composed of Magellan southern beech. In Cerro Castillo, the highest hilltops and slopes (1000–1500 m elevation) are extensively covered by old-growth deciduous *Nothofagus* forest dominated by lenga.

After Figueroa *et al.* (2002), our observations represent the strongest evidence of a southern range expansion of the White-throated Hawk in Chile representing a significant extension in the species' latitudinal distribution (almost 450 km south). This range expansion is consistent with a record reported by Darrieu *et al.* 2008 at almost the same latitude in Los Glaciares National Park in Argentina ( $50^{\circ}02'$  S,  $73^{\circ}06'$  W). Overall, the record dates of adult hawks in Aysén agreed with those reported for the

breeding period in southern Argentina and Chile (Trejo *et al.* 2004, Rivas-Fuenzalida *et al.* 2013). Observation of adult White-throated hawks during mid-winter in Aysén (July) is consistent with a previous finding at similar date in southwestern Argentina (Casas & Gelain 1995). It is possible that hawks recorded during winter belong to a resident population as believed by Goodall *et al.* (1957). More subsequent monitoring is needed to confirm if the White-throated Hawk is further extended and whether it breeds in Aysén. An undocumented occasional observation of a White-throated Hawk pair with a fledgling in Caleta Tortel ( $47^{\circ}51'$  S; T. Rivas-Fuenzalida, com. pers.) indicates that species would breed in southernmost Chile. In view of the increasing loss of native forest in the central and southern Chile, presence of extensive forest remnants in southernmost Chile could ensure reproductive habitats for this migratory forest-specialist hawk.

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**Figure 1.** Records of White-throated Hawk (*Buteo albogularis*) in Aysén, Chile. Dark zone in the left map represents the reported distribution of the species in Chile according to Jaramillo (2003) and Figueroa *et al.* (2002). The triangle indicates the record documented by Figueroa *et al.* (2002) and dots represent the new records documented here. Gray areas indicate forest cover in the Aysén region (see Legend).

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