



## On Perry O. Simons' 1899 collecting locality “Porvenir” in Ecuador

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### Abstract

The locality of Porvenir, *sensu* the collecting locality of Perry O. Simons (1869–1901), is geolocated, and approximate coordinates are provided, along with a map showing a number of other important nearby sites also visited by Simons and referenced in the historical zoological literature. Discussion on the incongruent coordinates for this locality mentioned in a number of previous works is provided.

**Key words:** Anura, Coleoptera, Hemiptera, Lepidoptera, Rodentia, geolocation, history of science, South America

Perry O. Simons (1869–1901) was born in Mineral Point, Wisconsin, USA and died in Las Cuevas, Mendoza, Argentina. He was an American naturalist and prolific collector whose work significantly contributed to the understanding of South American fauna. In 1898, Simons was recruited by Oldfield Thomas (1858–1929), curator of mammals at the British Museum, for a three-year expedition across the Andes. He collected extensively in Ecuador, Peru, Bolivia, Chile, and Argentina. During these expeditions, Simons gathered numerous specimens, many of which were later used by contemporary scientists to describe new taxa (Anonymous 1903; Boulenger 1899, 1902; Chubb 1919; Thomas 1900, 1902).

One notable location in Ecuador where Simons collected specimens was “Porvenir”, which became the type locality for at least three species of insects, two amphibians, and three mammals (Table 1). Several authors, however, have reported conflicts over the geographic position of this locality without being able to pinpoint it. Brown (1941) stated about Porvenir that “there is an Hacienda of this name belonging to the Cordovez family about a half day’s journey west of Hda. Talahua... This may be the locality represented in some collections.” Musser *et al.* (1998: 272), in discussing the type locality of *Oryzomys bolivaris*, stated that “We cannot find Hacienda Porvenir on maps,” and they placed the point on their distribution map in the northern area of Bolívar province, west of Talahua, based on Brown’s (1941) assertion. Racheli & Racheli (2001) stated that Porvenir would be in the province of Los Ríos, which is adjacent to the province of Bolívar. Santos-Silva *et al.* (2013), referring to the type locality of *Prionacalus whitei*, stated: “According to Directory of Cities and Towns in World (1996–2010), there are many places named ‘Porvenir’ in Ecuador. These places are in different provinces: Francisco de Orellana, Manabí, Pastaza, Guayas, Esmeraldas, and Pichincha. Thus, it is not possible to know exactly where the type locality of *P. whitei* is.”

Conversely, some authors have put forth specific locations for Porvenir yet yielded disparate results. Paynter & Traylor (1977) provided coordinates (01°05’S, 79°39’W) and called the site “Hacienda El Porvenir”. These coordinates point to a town called “Porvenir” but in the Guayas province and at an elevation of 75 m. This contradicts the information reported by all the authors who had direct contact with Simons and his data, as Porvenir was consistently reported to be situated in the Bolívar province at an elevation of 1500–1800 m. Paynter (1993) no longer referenced the coordinates offered by Paynter & Traylor (1977) and instead cited information provided by Chubb (1919) and Brown (1941). Lynch & Duellman (1997) provided coordinates (1°16’24.0” S, 79°07’48.0” W)

and indicated that Porvenir is at “1760 m... A hacienda on the western slopes of the Cordillera Occidental, 11 km SW Facundo Vela”—although their coordinates indicate a location at 1500 m elevation. Lynch & Duellman’s (1997) location is in the Bolívar province and within the elevational range reported by Simons, although they did not report the sources used to determine its geographic position.

**TABLE 1.** Taxa described based on type material collected at the locality Porvenir by Perry O. Simons. \* Although Butler (1901) did not specify that the type material of *Precis fuscescens* was collected by P. O. Simons, it was deposited at the British Museum of Natural History (now Natural History Museum, London), where Simons’ specimens are housed. As far as is known, Simons was the primary collector working in that locality and depositing collections in this museum.

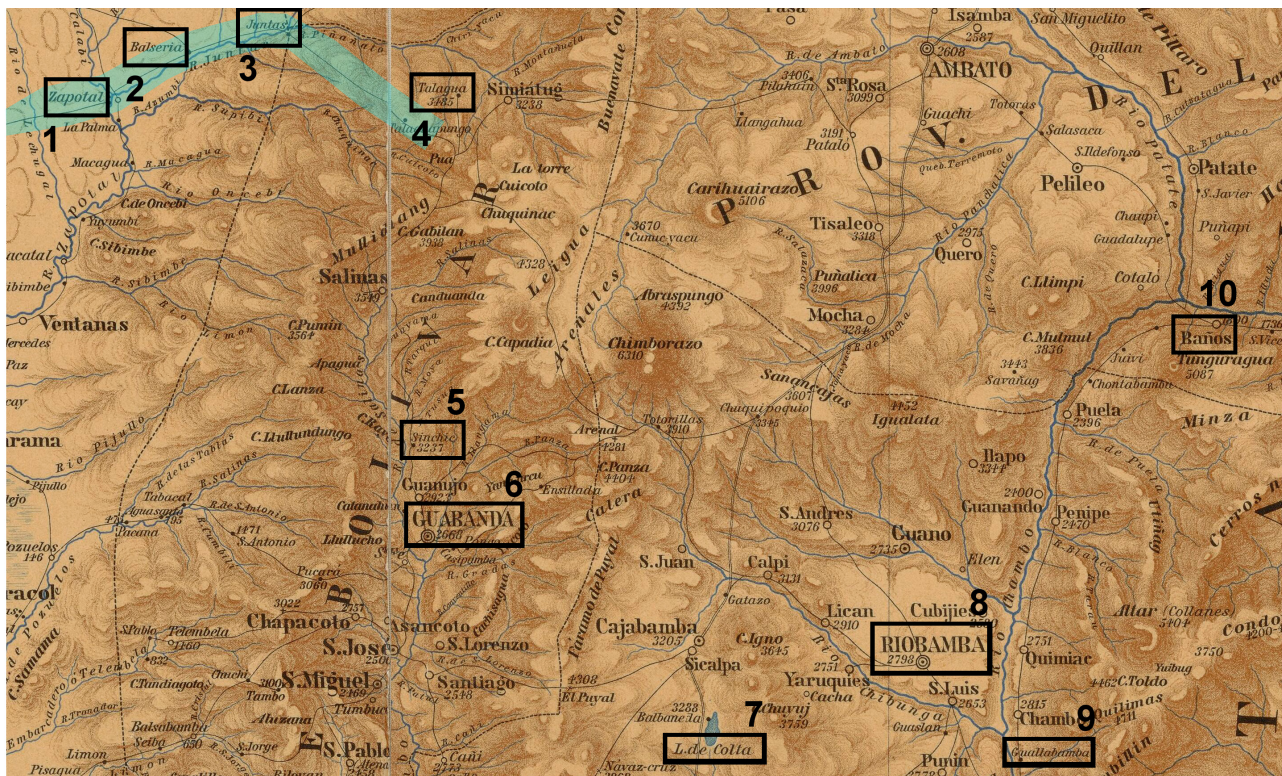
Phylum, class, order, family	Original name	Author, year	Type locality	Current name
Arthropoda, Insecta, Coleoptera, Cerambycidae	<i>Prionacalus whitei</i>	Waterhouse, 1900	Ecuador, Porvenir	<i>Prionacalus iphis</i>
Arthropoda, Insecta, Hemiptera, Coreidae	<i>Sephina humeralis</i>	Distant, 1901	Ecuador, Porvenir	<i>Piezogaster humeralis</i>
Arthropoda, Insecta, Lepidoptera, Nymphalidae	<i>Precis fuscescens</i>	Butler, 1901*	Porvenir, Ecuador	<i>Junonia fuscescens</i>
Chordata, Amphibia, Anura, Dendrobatidae	<i>Prostherapis tricolor</i>	Boulenger, 1899	Porvenir, Bolivar, western slope, about 5800 feet.	<i>Epipedobates tricolor</i>
Chordata, Amphibia, Anura, Strabomantidae	<i>Hylodes crucifer</i>	Boulenger, 1899	Porvenir, Bolivar, 5800 feet	<i>Pristimantis crucifer</i>
Chordata, Mammalia, Rodentia, Cricetidae	<i>Oryzomys bolivaris</i>	Allen, 1901	Porvenir, Bolivar, Ecuador, altitude 1800 m.	<i>Transandinomys bolivaris</i>
Chordata, Mammalia, Rodentia, Cricetidae	<i>Phyllotis melanius</i>	Thomas, 1913	Porvenir, Bolivar, Ecuador. Alt. 1800 m.	<i>Phyllotis andium</i>
Chordata, Mammalia, Rodentia, Sciuridae	<i>Sciurus (Microsciurus) simonsi</i>	Thomas, 1900	Porvenir, near Zaparal, Province of Bolivar, Ecuador, altitude 1500 m.	<i>Microsciurus simonsi</i>

In this work, we aim to clarify the geographic position of the locality Porvenir in the context of zoological material collected by P. O. Simons in Ecuador.

To determine the correct geographic position of Porvenir, it is necessary to understand Simons’ itinerary in Ecuador. Chubb (1919) presented a list of localities visited by Simons during his expedition to Ecuador, Peru, Bolivia, and Argentina, arranged chronologically based on Simons’ diaries. The first place listed for Ecuador is Puna Island, where Simons arrived on 1 November 1898. He then went to Chongón and Guayaquil, the capital city of the Guayas province, and climbed up into the Andes, arriving at the Colta Lagoon on 9 November. He spent most of December in Sinche, Guaranda, the capital of the Bolivar province, and towards the end of the year, he went to Riobamba, the capital of the Chimborazo province. On 16 January 1899, Simons visited [San Antonio de] Guallabamba in the Chimborazo province and then in February 1899, he went to Mirador, below Baños, in the Tungurahua province (given by error as Azuay province, Chubb 1919: 3, see Thomas 1899). On 1 March 1899, he was in Talahua, in the Bolivar province, and on 10 March, he arrived at Porvenir (mistakenly cited as ‘Povenir’ by Chubb 1919: 3). On 27 March, he returned to Riobamba, from where he left in April 1899 for southern Ecuador (provinces of Cañar, Azuay and El Oro). These dates coincide with those in the scientific papers reporting the collection dates at Porvenir. For



example, the type material of *Oryzomys bolivaris* was reported to have been collected on 10 March 1899, *Phyllotis melanius* on 12 March, and *Sciurus simonsi* on 16 March (Allen 1901; Thomas 1900, 1913).



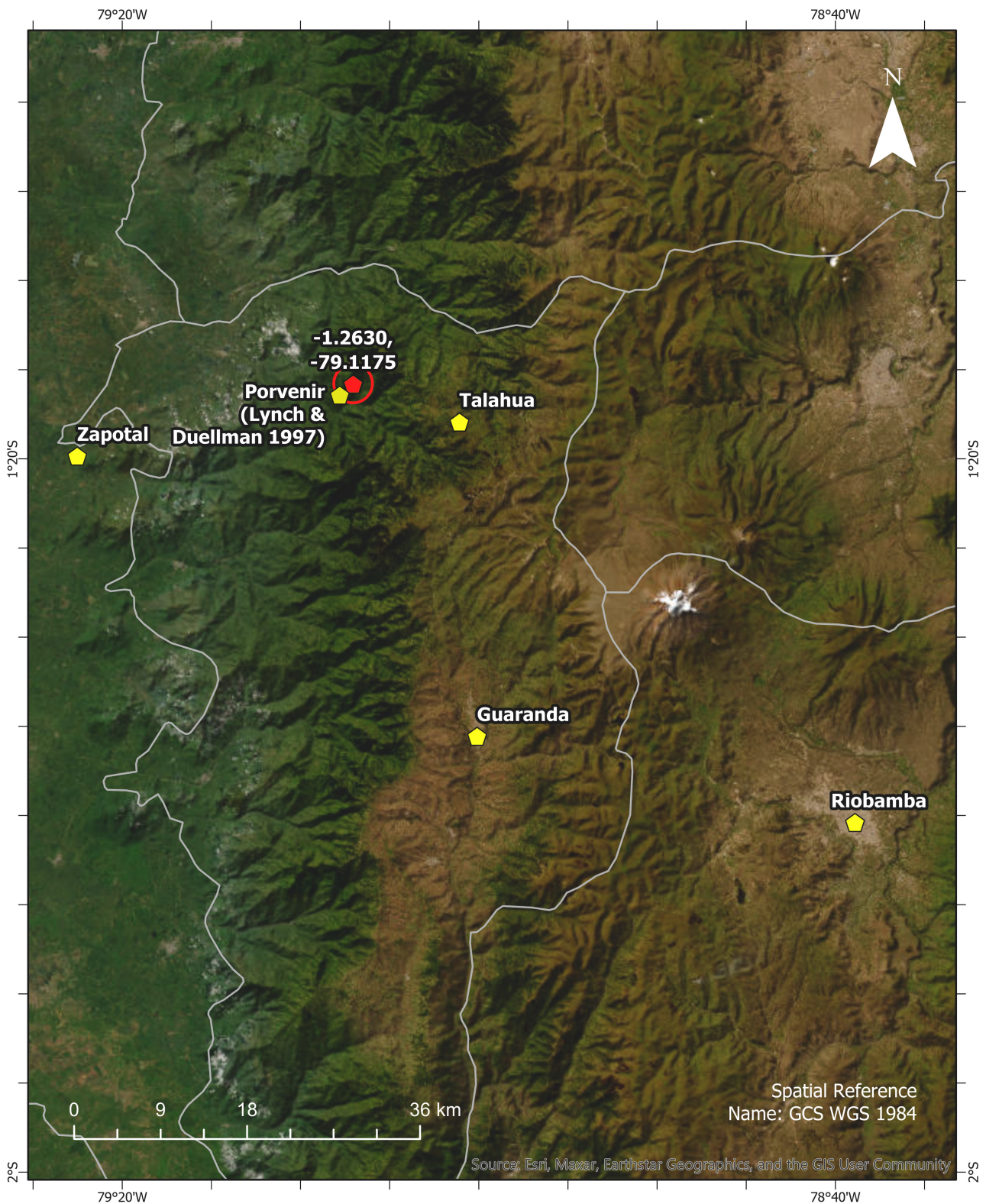
**FIGURE 1.** Section of the *Carta Geográfica del Ecuador* by Wolf (1892) showing the location of Talahua (4) and the bridle path (marked with light blue) towards the villages of Las Juntas (3), Balseria (2), and Zapotal (1) and some of the localities visited by Perry O. Simons in the central Andes of Ecuador, including Sinche (5), Guaranda (6), Colta Lagoon (7), Riobamba (8), Guayllabamba (9), and Baños (10).

Several authors have sought to ascertain the precise location of Porvenir based on Chubb's (1919) itinerary and Brown's (1941) comment that Porvenir was situated approximately half a day's walk west of Hacienda Talahua. Hacienda Talahua was a landed estate under the ownership of the Cordovez family from 1861 until 1982. The hacienda encompassed an area of approximately 300 km<sup>2</sup>, subdivided into five administrative landholdings (sometimes called haciendas): El Porvenir, La Delicia, La Envidia, La Eugenia, and Talahua (Torres 1984). The territory that constituted the landholding of El Porvenir is now incorporated into the Facundo Vela parish within the Guaranda canton, Bolívar province (-1.280, -79.133; OpenStreetMap contributors 2022). Although these coordinates currently indicate a hamlet at an elevation of 1,300 m, the El Porvenir was a large estate occupying a considerable altitudinal gradient.

Thomas (1900) provided an additional reference by stating that Porvenir was "near Zaparal". A review of available gazetteers, maps, and cartographic references of Ecuador from the 19<sup>th</sup> and 20<sup>th</sup> centuries revealed no mention of Zaparal. Nevertheless, it seems reasonable to suggest that it may, in fact, correspond to "Zapotal", a locality situated to the west of Talahua. Wolf's (1892) geographical chart depicts at least one bridle path originating in Riobamba and traversing the region between Talahua towards the villages of Las Juntas, Balseria and Zapotal for approximately 47 km (Fig. 1). The landholding of El Porvenir was located along this route.

When all the evidence is considered together with the altitudinal range at which Simons collected, it becomes evident that Simons' collecting locality of Porvenir most likely corresponds to the landholding El Porvenir, which formed part of the Hacienda Talahua. The location of this landholding is close to the coordinates proposed by Lynch & Duellman (1997). To reflect the uncertainty associated with the geographic position of this locality, we restrict Porvenir, the type locality of *Prionacalus whitei* Waterhouse 1900, *Sephina humeralis* Distant 1901, *Precis fuscescens* Butler 1901, *Prostherapis tricolor* Boulenger 1899, *Hylodes crucifer* Boulenger 1899, *Oryzomys bolivaris* Allen 1901, *Phyllotis melanius* Thomas 1913, and *Sciurus (Microsciurus) simonsi* Thomas 1900, as follows:





**FIGURE 2.** Map showing the location of Porvenir (red pentagon representing the focus point at -1.2630, -79.1175 and red circle with a radius of 2 km) and other localities mentioned in the text. KMZ files showing the type localities are available at <https://www.zenodo.com>.

Porvenir or Hacienda El Porvenir. Administrative landholdings part of the Hacienda Talahua, a landed estate owned by the Cordovez family from 1861 until 1982, located on a mountainous area on the western slope of the

Cordillera Occidental of the Andes of Ecuador, between 1500 and 1800 m elevation, Bolívar province, Republic of Ecuador. Coordinates focus point: -1.2630, -79.1175, radius: 2 km (Fig. 2). This approach allows for considering the potential variability in the location while maintaining a clear delineation of its boundaries (Cisneros-Heredia 2017; Wieczorek *et al.* 2004).

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