**Partnerships between private landowners and conservationists to protect one of the most evolutionarily distinct amphibians**

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Supplementary Material 1 Research publications about Barrio’s frogs published since the description of the species in 1970. Publications were searched using Web of Science and Google Scholar with the terms “*Insuetophrynus*” OR “Barrio’s frog”. We excluded species checklists or reviews that mentioned the species without providing novel information or analyses. The search was performed on 7th August 2023.

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Supplementary Table 1 Habitat quality scores for two high-gradient streams present in the private protected area Refugio de Ranitas Aldea del Viento, Los Pellines, Valdivia, Chile. Scores for 10 habitat parameters were determined using the visual-based habitat assessment protocol described by Barbour et al. (1999) for high-gradient streams. Parameters were measured at four points per stream, distributed evenly across a 250-m section. Habitat quality scores defined by Barbour et al. (1999) are coloured according to four condition categories (green = optimal, yellow = suboptimal, orange = marginal, red = poor). *Insuetophrynus acarpicus* individuals were only found in stream B.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Habitat parameter** | **Stream A** | | | | **Stream B** | | | |
| P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 |
| 1. Epifaunal  Substrate/  Available Cover | 15 | 20 | 15 | 15 | 16 | 18 | 17 | 18 |
| 2. Embeddedness | 19 | 17 | 16 | 13 | 15 | 11 | 12 | 17 |
| 3. Velocity/Depth  Regime | 3 | 9 | 4 | 3 | 9 | 14 | 5 | 5 |
| 4. Sediment  Deposition | 20 | 17 | 12 | 14 | 14 | 16 | 12 | 17 |
| 5. Channel Flow  Status | 19 | 20 | 18 | 17 | 19 | 18 | 17 | 20 |
| 6. Channel  Alteration | 17 | 20 | 18 | 16 | 20 | 20 | 19 | 20 |
| 7. Frequency of  Riffles (or bends) | 17 | 18 | 17 | 14 | 19 | 19 | 18 | 17 |
| 8. Bank Stability | 16 | 19 | 17 | 14 | 18 | 19 | 18 | 19 |
| 9. Vegetative  Protection | 10 | 20 | 20 | 16 | 20 | 19 | 20 | 19 |
| 10. Riparian  Vegetative Zone  Width | 14 | 20 | 20 | 18 | 20 | 20 | 20 | 20 |

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