

Project Update: October 2018

Our proposal budget included an amount of £ 2,717* for installing an internet connection near the admirable red bellied toad (ARBT) breeding grounds at Perau de Janeiro. This value included installation of transmission posts (small towers) to bring signal all the way from Arvorezinha to our field site (about 12 km). We would have to pay the cost of the posts because we would be, as it was apparent then, the only users of the service. In September 2017, however, when we were about to start installation, *Dual Informática*, an information technology company from Arvorezinha, installed internet for half a dozen rural families within less than 5 km from our site. This development was extremely interesting because it eliminated the need for us to pay for the whole cost of an infrastructure that is useful for many users. At the same time, *Dual Informática* would provide maintenance for a monthly cost and be responsible for transmission equipment. In a verbal agreement with *Dual Informática* in November 2017 we agreed to install a cable with internet at our site for a fraction of the budgeted cost (£ 600). After many delays, in May 2018 *Dual* extended a cable at the site but ended up never connecting it. We spent 9 months of rather complex negotiations with the company, which, at the time, was the only provider of internet for our area. *Dual* never acted on the agreement and we never paid them for any service. We finally concluded that they don't want to add our connection for technical difficulties that they will not explain and decide to move on. Fortunately enough, we recently found a second company that is willing to install internet for us and is starting to operate in the area. This second company, *Delta Internet*, just sent a budget of £ 705 for installing internet at the Perau. The cost is a little higher than with *Dual* but it is still lower than our initial budget because it is shared among additional neighbours who also want internet. If all goes as expected, we will have internet at the site by the end of October 2018.

Meanwhile, we continued sampling with the help of Graziela, the local resident who made weekly visits to the site in 2016 and improved our sampling efficiency. We already performed five visits (Figure 1) and obtained 1,800 captures over the last 5 months. Considering that a day of fieldwork costs approximately £85, the monthly visits brought down the cost per capture from nearly £3.5 to just under £1 since Graziela



began to help. The main motivation to seek an improvement over the weekly visits solution is that weekly visits afford a relatively low chance of catching a breeding event right at the beginning when compared to the daily 'visits' of a surveillance system.

Figure 1. Sampling in September 2018, at Perau de Janeiro, Arvorezinha, Rio Grande do Sul, Brazil.

In 2016 and 2017 we were not lucky enough to see the beginning of one event and thus always arrived when the explosion was well under way. As a result, we ended up capturing fewer individuals than we could. In any case, we will definitely continue to hire weekly visits at least until the surveillance system is working reliably.

Our plans to collaborate with the local school Professor Angelo Ferreira dos Santos suffered a setback because the municipal government of Arvorezinha closed the school. To work around this problem, we partnered with Patricia Bohrer, a teacher and collaborator of the NGO *Instituto Curicaca*, to organise an environmental education workshop at our field site for teachers of five public schools (Figure 2). The workshop was attended by 30 teachers who shared experiences about biodiversity appreciation in general and about natural history of the ARBT in particular. This workshop was funded by *Instituto Curicaca*, so we still have the £ 122 to pay for food and lodging during a visit to State Elementary School (EEEF) Mathilde Gehlen, which remains open, in December 2018.



Figure 2. Awareness workshop for Arvorezinha school teachers, realized in March 2018 at the Perau de Janeiro campsite in partnership with *Instituto Curicaca*.