

# Project TytoTagus Newsletter



Photo: Inês Roque

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### TytoTagus 2008: provisional evaluation

In 2008 the TytoTagus project went through a transition period. Efforts were mainly concentrated on the diffusion of the project and the study of owls in general.

The Nest-box Day initiative, broadcasted by the Portuguese TV Station "SIC" in its weekly report about environmental questions "Terra Alerta", gave origin to the story "The Barn Owls Enigma" and gathered land owners, farmers and conservation specialists. The event, supported by Companhia das Lezírias, S.A., allowed the consolidation of preexistent partnerships. namely with the Global Owl Project, the Barn Owl Trust and Associação de Beneficiários da Lezíria Grande de Vila Franca de Xira.

The Seminar "Owls and Science, Culture and Conservation" held in the University of Evora, gathered technicians, interested citizens and specialists from all over the country (Madeira Island included). The state of the art concerning the knowledge and world was evaluated, as

well as the species' relationships with human populations.

In what the scientific component is concerned. the *Tyto*Tagus project expanded its study goals and now supports a master thesis on toxicology.

Although in the scope of results, the year of 2008 was less productive than the previous (2007 was exceptionally fruitful), TytoTagus had a chance to establish new aims and formulate some considerations about the conservation of owls in the future. 2009 promises new challenges!

#### Talking with...Célia Gomes (Master Student)

Célia Gomes is a master student in Conservation (University **Biology** She joined Evora). the TytoTagus team in 2008, participating in several trips for collecting for her master thesis on the use of Barn Owl as bioindicator for heavv metal contamination. Célia tells us more about her work.

*Tyto*Tagus Newsletter: Would you like to tell us about your first contact with the TytoTagus Project?

Célia Gomes: First through LabOr and after during the Master in

Conservation Biology.

TTN: Which are the main goals of your master thesis?

CG: To check out the existence of pollutants in Tyto alba (e.g. heavy metals and biocides), and quantify its levels in two areas with different land occupation. After that, I would like to know its impacts on the barn owls populations.

TTN: Which main results do you predict and how will do they contribute for barn owl conservation?

CG: Evaluating the existence of environmental contamination and if this is confirmed, check for correlations among land uses in the study areas and the recorded parameters. I also would like to know if the values could be limitative for Tyto alba.

TTN: In what ways has the TytoTagus Project been supporting your work?

**CG:** Sharing information, documents and ideas since the first contacts.

#### Talking with... (Continuation)



The veterinarian Filipe Martinho collects blood for further toxicological analysis while the TytoTagus team (Inês and Ana) take care of the ringing process. Célia is behind the camera!

Afterwards, logistical support and field knowledge. Hence, I would like to thank the team!

TTN: Which message would you like to leave to this newsletter readers?

**CG**: Follow up the *Tyto*Tagus Project! It will be worthwhile! ■

#### **RIPIDURABLE**

ended ...

The European project that allowed the formal start of *Tyto*Tagus ended in July (2008).

In the International Seminar, carried out in Lisbon last 20<sup>Th</sup> June, João E. Rabaça presented a communication where he made a scientific and strategic evaluation of the *Tyto*Tagus linkage to the project RipiDurable. The presentation can be viewed at the project web site (www.ripidurable.eu) on the "News" tab. ■

#### The Barn Owl Enigma: SIC report

"The result was a TV story on the TytoTagus project, thus spreading the Barn Owl and its conservation importance." Carla Castelo is a press reporter in charge of the television spot "Terra Alerta", broadcasted every Wednesday on the Evening News of the national TV station SIC. She joined the *Tyto*Tagus team, David Johnson and his wife Shari, on a night-time transect conducted in the Tagus Estuary. The night was lightened by a shinning full Moon and the

owls were extremely cooperative. The footages continued a few days later during the Nest-box Day at Companhia das Lezírias (page 3). The result was a TV story about the *Tyto*Tagus project, thus spreading the Barn Owl and its conservation importance. The "Barn Owl Enigma" can be viewed online at the web site:

http://sic.aeiou.pt/online/ noticias/programas/terraal erta/Artigos/corujadastorre s.htm.



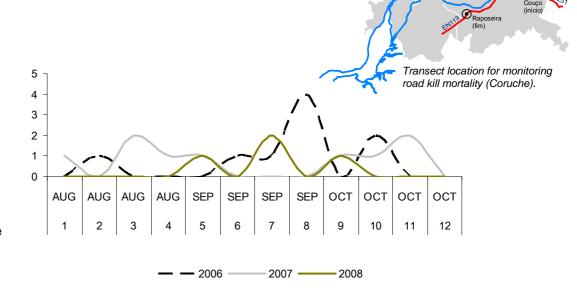


David Johnson and Ana Marques preparing the stuff for the transect: the light is connected to the car battery. At right: one of the owls seems to pose for the camera, in a delicate balancing exercise. (Images taken from the TV report)

#### Results

#### ■ ■ Road Kill Mortality and Reproductive Phenology

Monitoring road kill mortality throughout the same roads for several years could help to understand the reproductive phenology of barn owls. The highest mortality overlaps with the juvenile's dispersion period. In 2007 this happened earlier in September and in 2006 the road kill peak happened latter in the same month. In 2007 there was a second dispersion peak (October), probably matching the dispersion period of birds from second broods, an event so far detected only in that year.



**Chart 1:** weekly variation of Barn owl road kill mortality between August and October 2006, 2007 and 2008, throughout the Sorraia transect (Coruche).

#### ■ ■ Owls surveys and Reproductive Success

Barn Owl' surveys carried out in the Tagus Estuary show a sharp inter-annual fluctuation. The owls' abundance could be related to that year reproductive success. In 2007 there was a peak of 106 individuals (August), while in 2008 the highest number of owls recorded was 57 (September).

In 2007, the average reproductive success was 4.5juv/nest, while in 2008 the value was 2.1juv/nest.

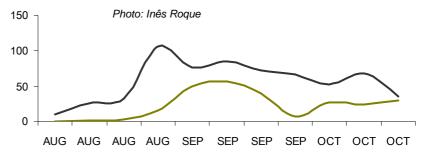
This variation is probably due to differences in food availability: in years with high levels of prey abundance (mostly small mammals), the number of breeding couples is higher, the number of young birds increases

and, usually, the breeding period occurs earlier in the season, enabling the occurrence of second clutches.

In 2008 a ringed juvenile, from the nest-box installed at the Companhia das Lezírias (Charneca) was visually recaptured. ■



During the transects, all the owls spotted flying or hunting from poles are counted and the presence of rings is checked out.



—— 2007 —— 2008

Chart 2. Weekly variation of Barn owl individuals at the Tagus Estuary between August and October (2007 and 2008)

"Several TytoTagus volunteers helped in building four nest-boxes. Two of them were installed at the same day in rural buildings located

# in Northern Lezíria."





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## The Nest-box Day: Public Awareness

On October 15<sup>Th</sup>, the 'Pequena Companhia' headquarters were the stage for a public awareness action focused on farmers and land owners from the Tagus floodplains. The guests (Associação Beneficiários da Lezíria Grande de Vila Franca de Xira and land owners) had the chance to talk with David Johnson, Director of the Global Owl Proiect

(www.globalowlproject.com), on the benefits they can profit from having Barn Owls on their farmlands. The main goal of the operation was to gathered



efforts towards species conservation, taking advantage of its traditional relationship with farmers. Several TytoTagus volunteers helped in building four nest-boxes. Two of them were installed at the same day in rural buildings located in Northern Lezíria.

For this initiative we acknowledge the Barn Owl Trust, support (www.barnowltrust.org), for providing plans and texts used to built and put-up the nest-boxes.



Top: David Johnson talking with farmers about the importance of Barn owls conservation. Left: Faísca helps João E. Rabaça installing a nest-box.

Photos: Carlos Godinho

#### Seminar: Owls in Science, Culture & Conservation

David Johnson introducina the main goals of the Global Owl Project and talking about his visit to Portugal to support the Tyto Tagus. Project.



On October 17<sup>th</sup> the Seminar 'Owls in Science, Culture and Conservation' took place at the University of Évora, a joint organization of the Master in Conservation Biology

(www.ensino.uevora.pt/mbc) and LabOr. David Johnson was one of the guests, and talked about the Global Owl Project main goals, highlighting its support to research projects on nocturnal birds of prey

throughout the world. Ricardo Tomé (SPEA chairman) was the second invited speaker and presented the state of the art about owl's knowledge in Portugal, The awareness of the event exceeded all our expectations: participants from northern to southern Portugal and from the island of Madeira filled up the room and took the opportunity to raise

important questions to the speakers.

During the afternoon, a work session only for specialists took place. aiming to discuss and set up the basis for the upcoming conservation of nocturnal birds of prey in Portugal.

#### ABOUT US:

Coordinator: João Eduardo Rabaça (Ph.D. Biology)

Executers: Inês Roque (M.Sc. Conservation Biology) Ana Marques (M.Sc. Nature Conservation & Management)

Participants in this issue: Célia Gomes (M.Sc. student) Carlos Godinho (M.Sc. Conservation Biology