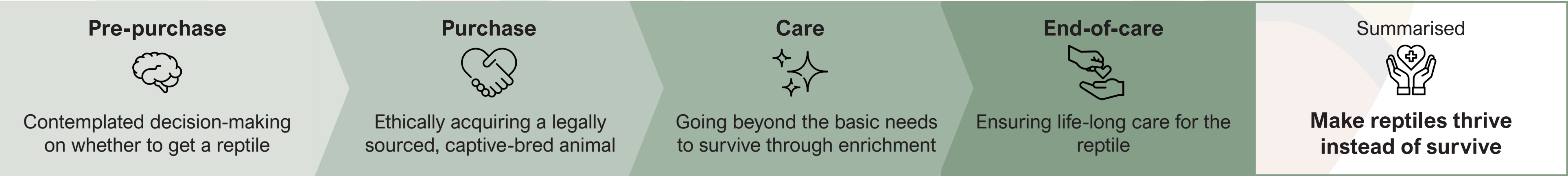


# Responsible reptile keeping

## How to stimulate and facilitate responsible ball python keeping in the Netherlands?

Reptile keeping is becoming more popular, and while reptile keeping can provide psychological, physiological, and social benefits, it also poses significant risks. The trade and keeping of reptiles contribute to wildlife crime, biodiversity loss, welfare concerns, invasive species, and public health risks. This thesis was conducted for the TU Delft exotic pet research team, which is currently collaborating with a European consortium to focus on demand reduction for exotic pets. While demand reduction is considered in certain stages of this project, the agreed primary focus of this thesis is on responsible reptile keeping. This serves as a positive and inclusive approach to mitigate the negative impacts of reptile ownership.

**Responsible reptile keeping** is defined in this project through four phases:



**The key stakeholder is the reptile pet owner**, as the consumer demand dictates the supply in reptile pet industry (Heijligenberg, 2021; Hausmann et al., 2023) and consumer demand influences market dynamics and innovation within industries (Malerba et al., 2007). **Ball pythons are selected as the focal species of this project** due to their popularity, prominent role in the pet trade, and suitability as a representative case to address broader challenges in reptile keeping.

As a result the project offers three tools which can contribute to responsible reptile keeping. Design scopes, which highlight areas of improvement in reptile keeping, an inspiration and explorative roadmap towards thriving, and the concept Royal: The Best You Can to kickstart the journey towards responsible reptile keeping.

## Design Scopes

### From Insights to Opportunities

The insights from the literature, field, and contextmapping study were translated to design scopes, areas where design can contribute to stimulate and facilitate responsible reptile keeping.

1. Impulsive purchases
2. Collecting reptiles and ball pythons
3. Responsible, legal, captive-bred ball pythons purchases
4. Responsible breeding
5. Enjoyment of ball python enclosure care
6. Science-based information acceptance and knowledge sharing on ball pythons
7. The optimal ball python terrarium
8. Dumping of ball pythons
9. Expressing ball python enthusiasm without stimulating purchase by others

## Roadmap

### Towards a Thriving Future for Reptiles

The roadmap is an inspirational and explorative overview of interventions based on design scopes 1, 2, 5, and 6, the scopes with the most potential impact on reptile wellbeing and demand reduction. Over a span of three horizons the roadmap strives towards responsible reptile keeping.

#### Horizon 1: Establish the foundation

Lay the groundwork for responsible reptile keeping by ensuring reliable, accessible information and entry-level interventions are in place.

#### Horizon 2: Expand science-based keeping

Expanding science-based keeping to promote deeper knowledge and shift the mindset to optimisation in reptile keeping. The optimal conditions for reptile wellbeing.

#### Horizon 3: A contributing reptile community

Foster an engaged community that advances reptile welfare through collaboration, knowledge-sharing, and active contribution to science and conservation.

## Royal: The Best You Can

### A reptile profile for ball pythons

**Royal: The Best You Can** is a visually engaging, science-based reptile profile from the first horizon that combines a ball python persona with reliable care information. Royal empowers both new and experienced keepers to make informed, reflective decisions and provides clear, practical guidance to improve welfare. **Royal is designed to be scalable across reptile species**, forming a foundation for future education and welfare tools.

The persona and ‘Reflect before you Commit’ introduce the reptile as an animal with specific need, helping keepers reflect on whether they can meet those needs to **reduce impulsive purchases**.

The care information in the reptile is science-based and focuses on **optimal care**, stimulating the reader to shift from “doing enough” to doing the best one can.

However, accessible information also carries the risk of unintentionally stimulating demand. Therefore, Royal carefully balances encouragement and realism to avoid glorifying ownership, while remaining suitable for key distribution channels. Its neutral tone of voice fosters collaboration between stakeholders with diverse views by creating common ground around reptile welfare. This makes Royal: The Best You Can suitable for distribution through multiple platforms, including educational websites, reptile sellers, and fairs.



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