Long-snouted seahorse *Hippocampus guttulatus* (Pisces: Syngnathidae) restocking management in the South coast of Portugal.

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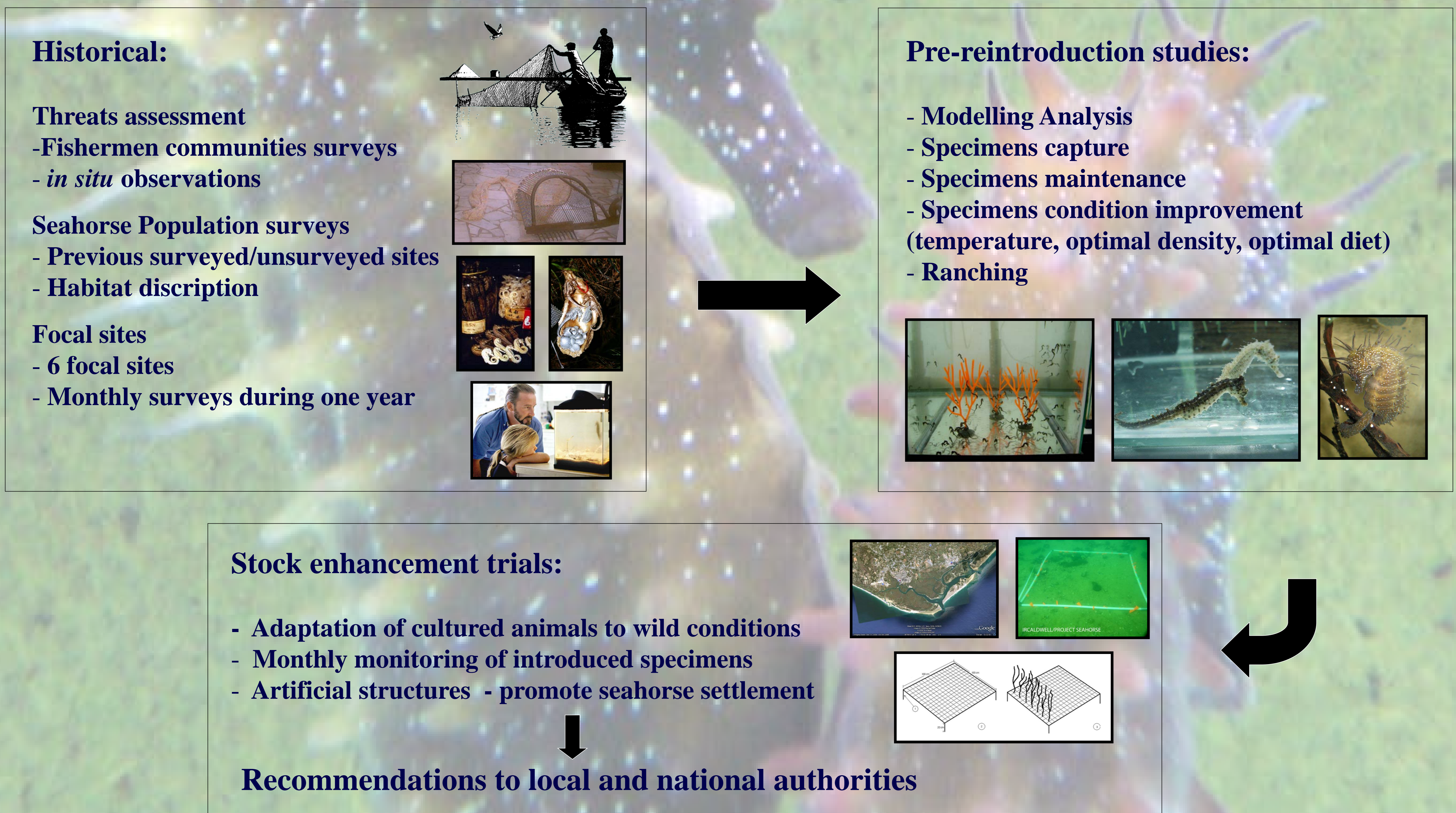
ZSL LIVING CONSERVATION

Objectives:

Assess the viability of re-stocking as a management option for the recovery of seahorse populations, using one European species (*Hippocampus guttulatus*) in the Ria Formosa as an example.

1. The status of seahorse populations in the Ria Formosa
2. Variation of seahorse populations over different temporal and spatial scales
3. Threats to seahorse populations in the Ria Formosa
4. Culture/ranching techniques
5. Effectiveness of population supplementation

Methodology:

Historical:

Threats assessment
- Fishermen communities surveys
- *in situ* observations

Seahorse Population surveys
- Previous surveyed/unsurveyed sites
- Habitat discription

Focal sites
- 6 focal sites
- Monthly surveys during one year

Pre-reintroduction studies:

- Modelling Analysis
- Specimens capture
- Specimens maintenance
- Specimens condition improvement (temperature, optimal density, optimal diet)
- Ranching

Stock enhancement trials:

- Adaptation of cultured animals to wild conditions
- Monthly monitoring of introduced specimens
- Artificial structures - promote seahorse settlement

Recommendations to local and national authorities

Time Line:

	Year 1												Year 2												Year 3												Year 4											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Threats Assessment:																																																
Seahorse Population Survey																																																
Habitat Description																																																
Modelling Analysis																																																
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Specimens Maintenance																																																
Ranching																																																
Small scale trial																																																
Stock enhancement																																																
Repporting																																																