# FOUR: depensation effects

## Task group planning:

| Task group 4 | Depensation effects |
|---|---|
| Task group leader | Catherine Bell |
| Task group leader contact details | Catherine.d.bell@gmail.com |
| Task group members (email in parentheses afterwards please) | Milani Chaloupka<br>Lucy Hawkes (lhawkes@wwfca.org) |
| Task group aims | To investigate the effects of climate change effects to the dynamics of severely depressed populations (the "depensation effect" |
| Task group missions | 1. To investigate how many males are needed to maintain sufficient population growth<br>2. To investigate what primary sex ratio would likely be acceptable to constitute a sufficient quantity of males in a population<br>3. To assess whether climate change may constitute a significant threat to marine turtles through the use of modelling |



## 1. Introduction

1.1 Group outputs

This task group will, through the use of modelling techniques, investigate various scenarios of population survivorship with varying operative sex ratios. This is a key metric to inform management of nesting beaches with respect to sex ratios (and to inform task group 3).

1.2 Special requirements

None anticipated at this time.

1.3 Management and technical constraints

None anticipated at this time.

## 2. Project estimates

2.1 Previous work
None.

2.2 Cost, effort and time estimates
This task group could be aligned with ongoing research by Drs Bell and Chaloupka who have a vested interest in this topic and have therefore chosen to lead this task group.
However, Dr Chaloupka would be able to make more significant progress if this task group could be taken on by Ecological Modelling Services as a consultancy.

2.3 Are you aware of any ongoing funding for climate change depensation effects?
No.

2.4 Project resources required
Office and internet connection.

## 3. Risk assessment

3.1 Project risks, probability and impact
None anticipated, this is mainly a data collation and then modelling exercise.

3.2 Risk mitigation
n/a

## 4. Project schedule

4.1 Framework of activities and tasks by month and year
See activity calendar.

4.2 Project task dependencies

4.3 Timeline for project outputs

| Activities | Project Outputs | Indicator | Baseline Value | Predicted Value Project Output |
|---|---|---|---|---|
| | | | | |
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## 5. Group structure

5.1 Roles in task group
Work will be undertaken as overseen by Catherine Bell and modelling will take place by Ecological Modelling Services Pty.

5.2 How will the group be coordinated

5.3 Mechanisms for reporting and communication

## 6. Monitoring

6.1 How will progress be monitored?

6.2 What progress indicators will you use?

## 7. Appendix

Supplementary information here
Other important information you feel needs to be communicated