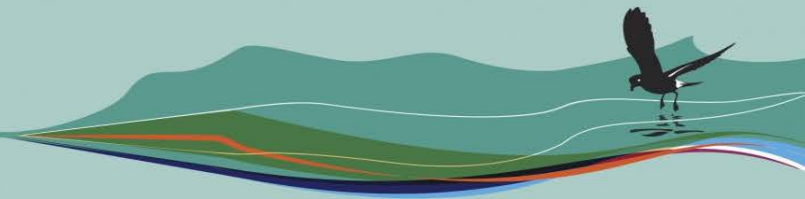


# LIGHT POLLUTION IMPACT ON SEABIRDS OF MALTA

Paulo Lago. BirdLife Malta

INTERNATIONAL WORKSHOP

23<sup>RD</sup> – 25<sup>TH</sup> NOVEMBER 2015



MINISTRY FOR SUSTAINABLE DEVELOPMENT,  
THE ENVIRONMENT AND CLIMATE CHANGE



Partnership for  
nature and people

## LIGHT POLLUTION

Excessive, misdirected, or obtrusive artificial light

Consequences: it washes out starlight in the night sky, interferes with astronomical research, disrupts ecosystems, has adverse health effects and wastes energy

Glare



Light trespass



Skyglow



## Increasing development since 70's in Malta



Picture taken by Paolo Nespoli from the International Space Station (ISS). Available at <http://www.nightearth.com/>



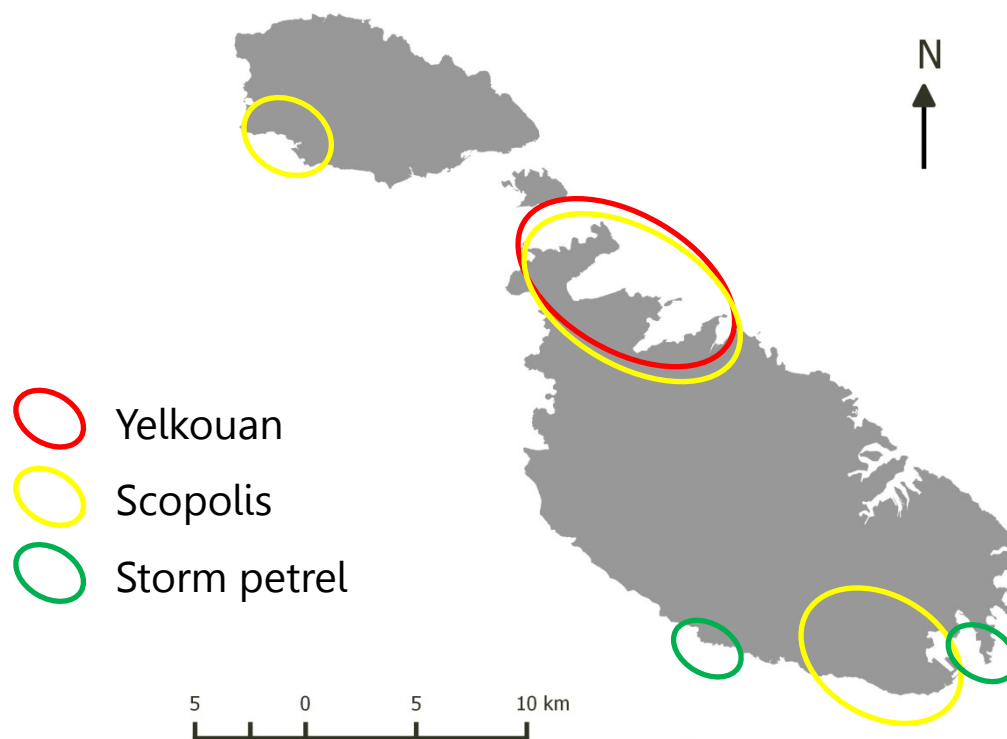
## IMPACT OF LIGHT POLLUTION ON SEABIRDS

- Colony disturbance: reduces available nesting habitat abandonment of colonies (Xlendi 1975, Sultana)
- Disturbs nesting birds
- Disorients fledglings



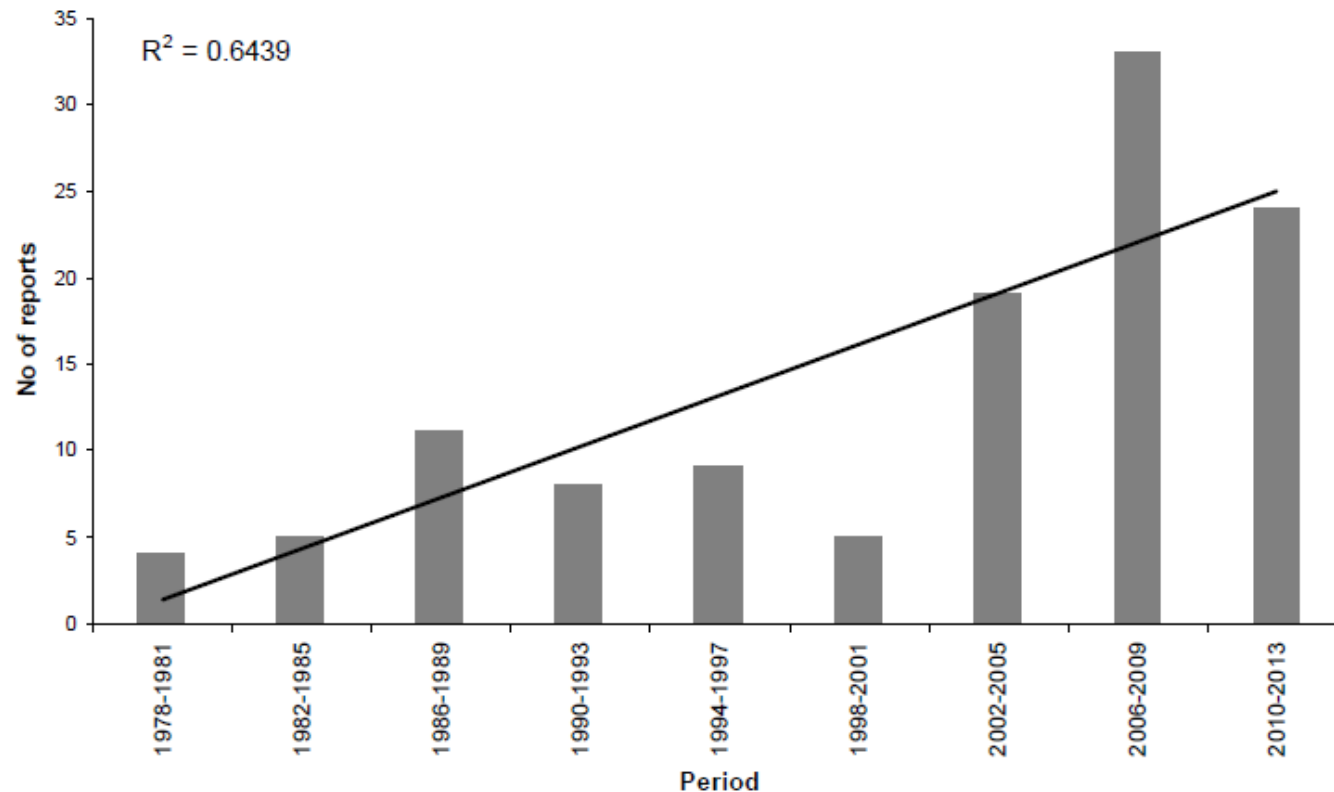


## SEABIRD STRANDING HOTSPOTS



120 cases of stranded seabirds along 36 years (1978-2013) reported to BirdLife Malta. 32 Yelkouan shearwaters, 79 Scopolis shearwaters, 9 Storm petrels  
44 locations all around Malta. (Juan Mula et al. In prep.)

Is light pollution becoming an increasingly concerning problem?

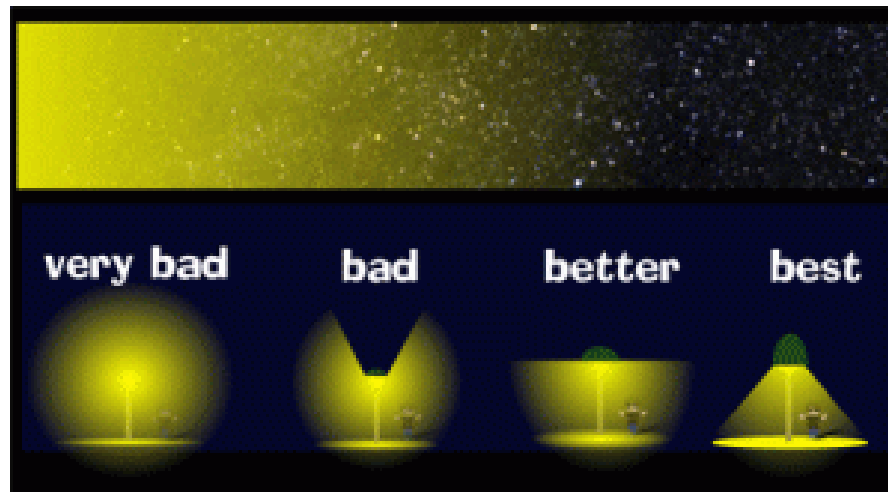


Seabird strandings in Malta 1978-2013 (Juan Mula et al. In prep.)



## How to reduce light pollution?

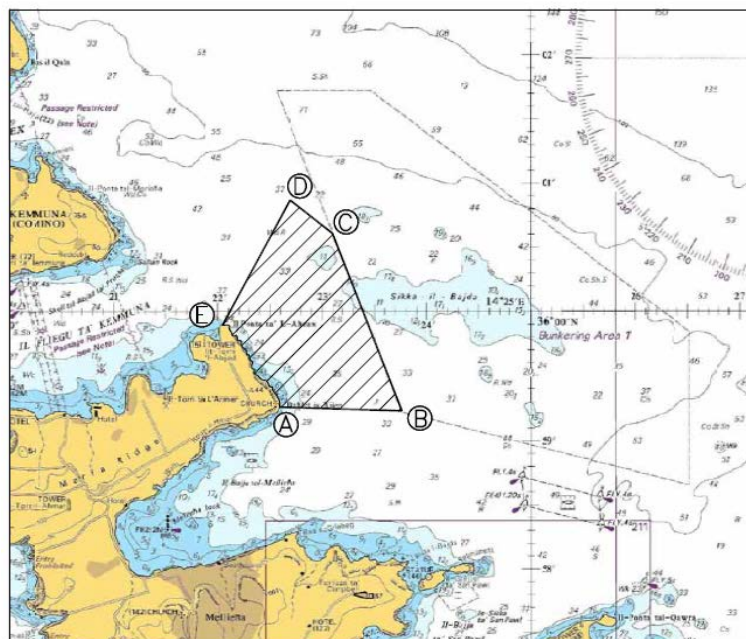
- Corrective measures
- Legislation
- Careful planning
- Public and stakeholders awareness



## BIRDLIFE MALTA ACTIONS

### **LIFE Yelkouan Shearwater project (2006-2010)**

- Legislative: Notice to Mariners No 02 of 2010



- Enforcement: meeting stakeholders, public awareness

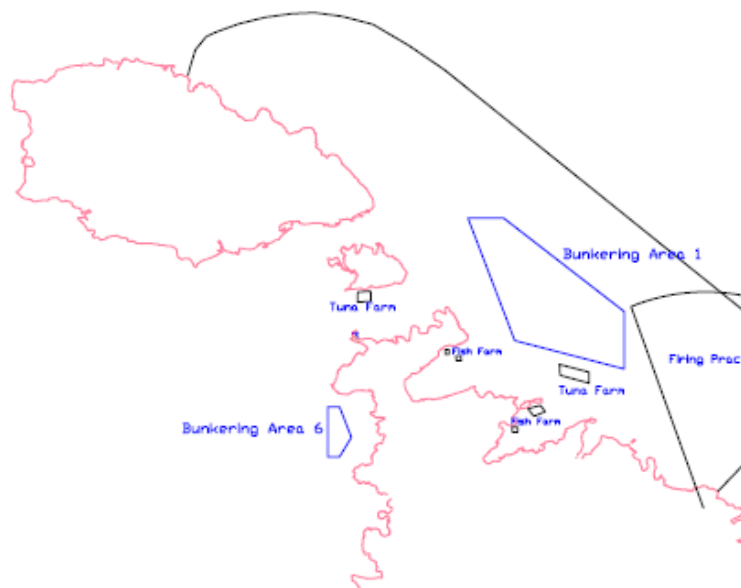




## BIRDLIFE MALTA ACTIONS

### **LIFE+ Malta Seabird project (2011-2016)**

- Measurement of light pollution from bunkering
- Pilot testing in Majjistral Nature & History Park



Prototype by Stephen John Cachia  
Bachelor thesis 2015



## BIRDLIFE MALTA ACTIONS

### **LIFE Arcipelagu Garnija (2015-2020)**

- Address and reduce light pollution on *P. yelkouan* colonies utilising policy and legislation.
- Practical example: Cirkewwa terminal

