

## Comparative plots of commercial CPUE and biomass survey index data (Leg1) for the Tristan da Cunha group of islands

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Figures 1-4 below plot the most recent Leg1 biomass survey index data (for 2006<sup>1</sup>-2013) along with the data collected from the commercial fishery (GLM standardised). The commercial CPUE shown reflects the longline fishery for the three outer islands, and the powerboat fishery for Tristan. In all cases, the biomass survey indices have been renormalized so that their average values over the 2006-2012 are the same as for the 2006-2012 commercial CPUE series. The nominal CPUE from the commercial fishery for the 2013 season is also indicated on each plot. Note that for Tristan, there is still some outstanding fishing to be undertaken in the 2013 season.

### Comments

**Tristan:** There appears fairly good agreement between the commercial CPUE and the biomass survey trends, except for the current season where the nominal CPUE appears to be unexpectedly high. It is unlikely that the GLM standardization will alter this value to a great degree. What could cause this result? The correlation between the two series for the 2006-2012 period is 0.713.

**Inaccessible:** Not very good agreement between the two trends for the 2012 season, and a large discrepancy between the biomass survey 2013 value and the nominal commercial 2013 value. The correlation between the two series for the 2006-2012 period is thus low, at 0.204.

**Nightingale:** The commercial series ends in 2010 (due to closure arising from the OLIVA). The biomass survey indices show a large improvement over the 2011-2013 period, and this is confirmed by the very high nominal CPUE value observed for 2013 in the commercial fishery. The correlation between the two series for the 2006-2010 period is 0.427 (note only four data points available).

**Gough:** The two trends correlate well, and the 2013 nominal CPUE is virtually identical to the survey results. The correlation between the two series for the 2006-2012 period is high at 0.933.

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<sup>1</sup> The split season is denoted here by the first year i.e. 2006 refers to the 2006/07.

Figure 1: Tristan CPUEs. The red horizontal line indicates the "TARGET" CPUE of the current OMP.

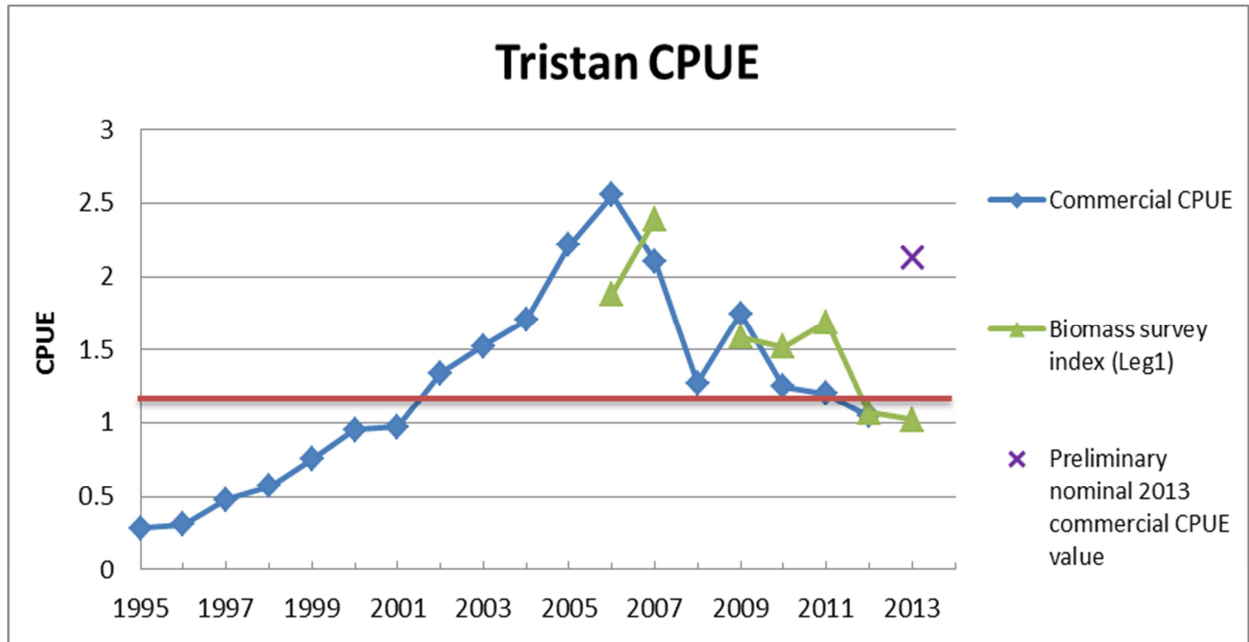


Figure 2: Inaccessible CPUEs.

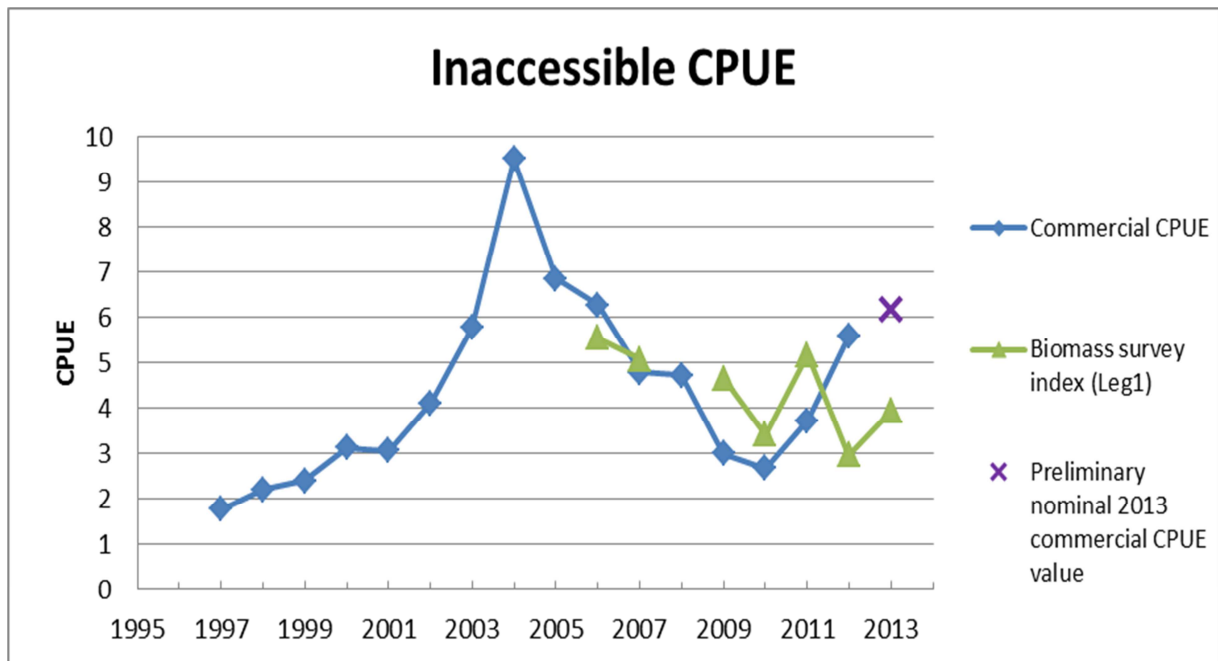


Figure 3: Nightingale CPUEs.

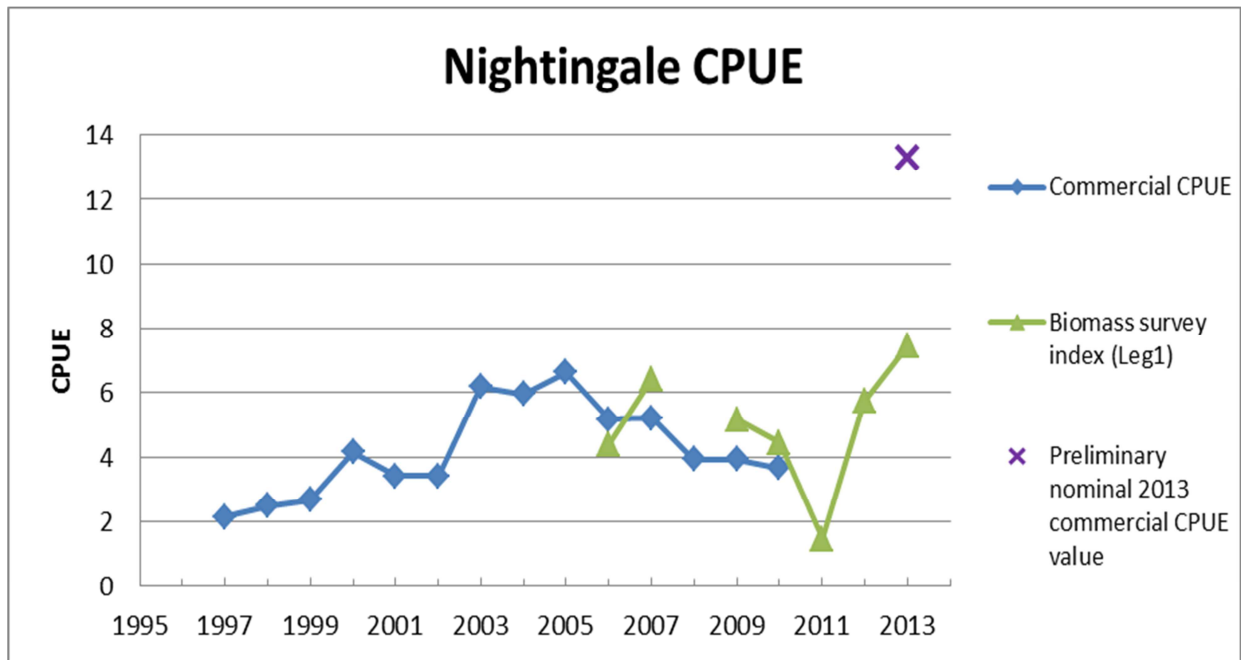


Figure 4: Gough CPUEs.

