

Bogue in Aegean Sea

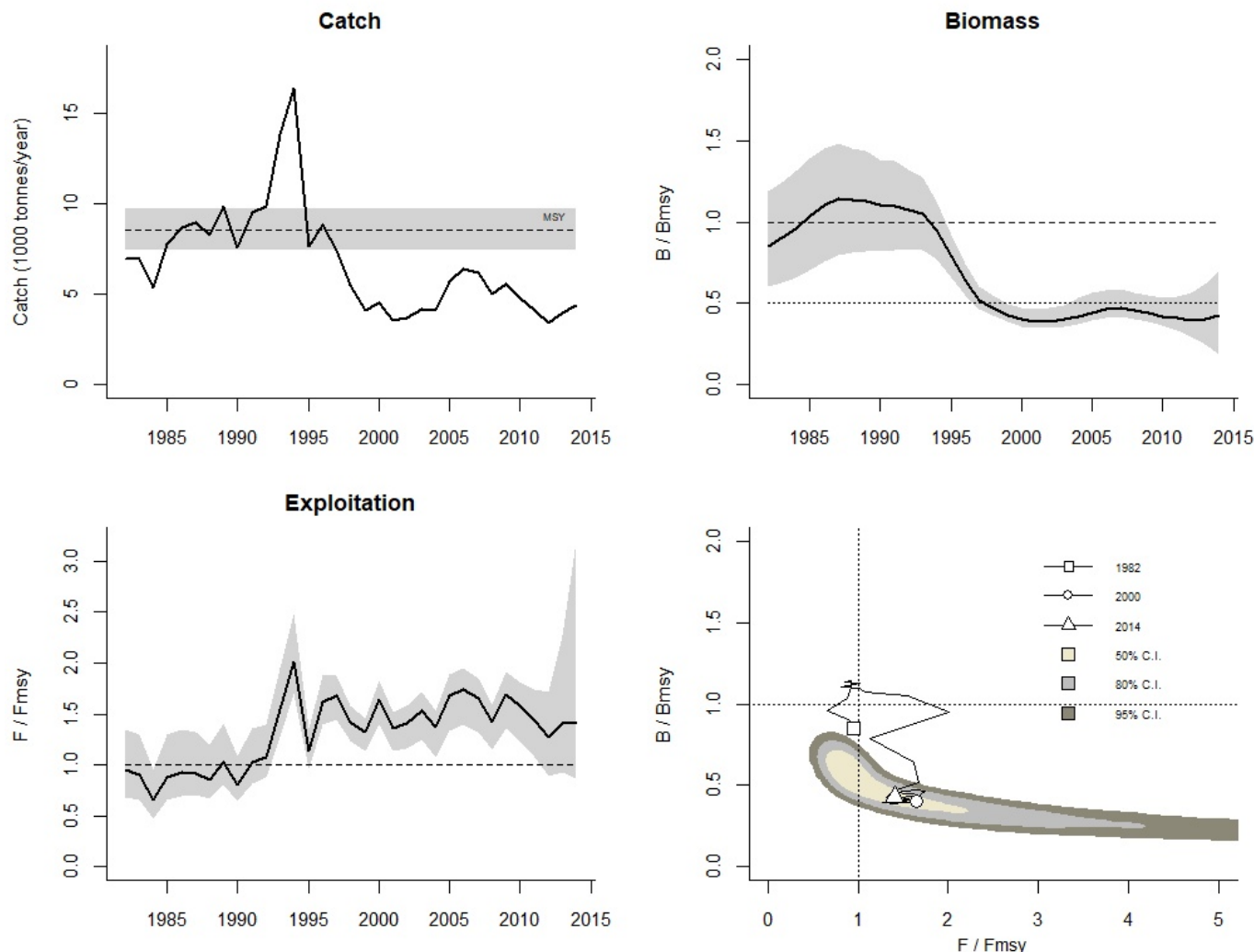
Species: *Boops boops*, Stock code: BOOPBOO_AL.

Region: Mediterranean.

Marine Ecoregion: Aegean Sea.

Reconstructed catch data used from years 1982 - 2014

For figure captions and method see <http://www.seaaroundus.org/cmsy-method>



Results for management (based on BSM analysis)

$F_{msy} = 0.294$, 95% CL = 0.21 - 0.41 (if $B \geq 1/2 B_{msy}$ then $F_{msy} = 0.5 r$)

$F_{msy} = 0.251$, 95% CL = 0.18 - 0.351 (r and F_{msy} are linearly reduced if $B < 1/2 B_{msy}$)

$MSY = 8.52$, 95% CL = 7.45 - 9.75; $B_{msy} = 29$, 95% CL = 21.6 - 39 (1000 tonnes)

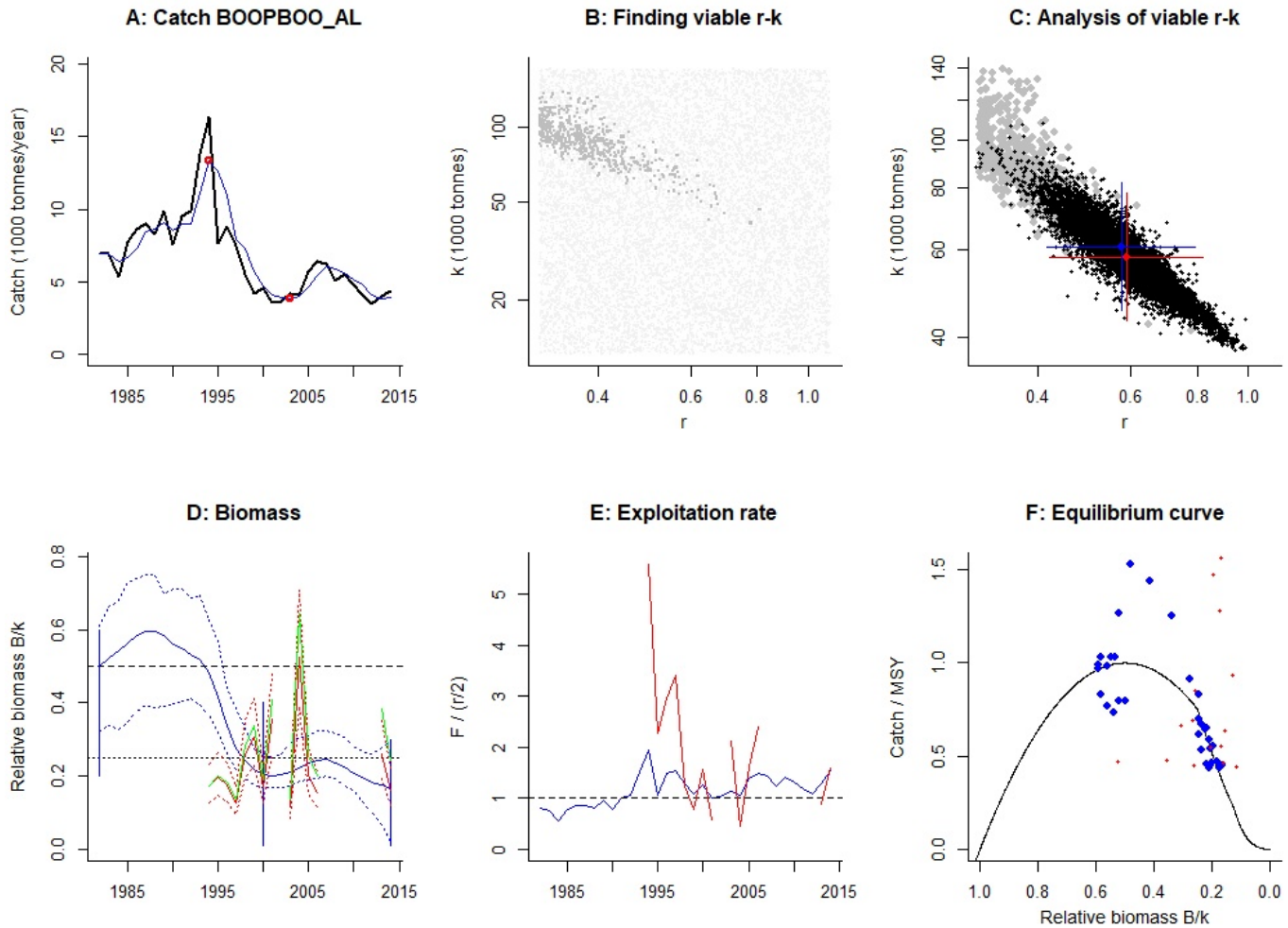
Biomass in last year = 12.4, 95% CL = 5.45 - 20.2 (1000 tonnes)

B/B_{msy} in last year = 0.428, 95% CL = 0.188 - 0.696

Fishing mortality in last year = 0.353, 95% CL = 0.217 - 0.804

$F/F_{msy} = 1.4$, 95% CL = 0.864 - 3.2

Comment: Catch=landings from FishStat (Greece+Turkey). RF final 0.3



Results of CMSY analysis with altogether 552 viable trajectories for 538 r-k pairs

$r = 0.574$, 95% CL = 0.415 - 0.794; $k = 60.9$, 95% CL = 45.3 - 81.7 (1000 tonnes)

MSY = 8.73, 95% CL = 7.17 - 10.6 (1000 tonnes/year)

Relative biomass last year = 0.163 k , 95% CL = 0.0198 - 0.294

Exploitation $F/(r/2)$ in last year = 1.54

Results from Bayesian Schaefer model using catch and CPUE

$r = 0.587$, 95% CL = 0.421 - 0.82; $k = 58$, 95% CL = 43.1 - 78.1

MSY = 8.52, 95% CL = 7.45 - 9.75 (1000 tonnes/year)

Relative biomass in last year = 0.214 k , 95% CL = 0.094 - 0.348

Exploitation $F/(r/2)$ in last year = 1.2

$q = 0.166$, 95% CL = 0.125 - 0.219

Prior range of $q = 0.106 - 0.4$

Relative abundance data type = CPUE

Prior initial relative biomass = 0.2 - 0.6 expert

Prior intermediate relative biomass = 0.01 - 0.4 in year 2000 expert

Prior final relative biomass = 0.01 - 0.3 expert

Prior range for $r = 0.31 - 1.1$ expert, prior range for $k = 12.1 - 172$ (1000 tonnes) default

Source for relative biomass: