

# West Africa Stocks

## v4.495 (Apr-17-2021)

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		U/Umsy	B/Bmgt	U/Umgt	
1. ANCHOCWACIV-BEN [Anchovy Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F	
2. ANCHOCWAGAB-AGO [Anchovy Central West Africa Gabon-Angola]	TB SSB	ER F	TB SSB	ER F	
3. ANCHONWA [Anchovy North West Africa]	TB SSB	ER F	TB SSB	ER F	
4. BCROAKCWAGIN-LBR [Bobo croaker Central West Africa Guinea-Liberia]	TB SSB	ER F	TB SSB	ER F	
5. BGRUNTCWACIV-BEN [Bigeye grunt Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F	
6. BGRUNTCWACOG-AGO [Bigeye grunt Central West Africa Congo.-Angola]	TB SSB	ER F	TB SSB	ER F	
7. BHAKECWAAGO [Benguela hake Central West Africa Angola]	TB SSB	ER F	TB SSB	ER F	
8. BONGACWAGAB-COD [Bonga Central West Africa Gabon-Congo DR]	TB SSB	ER F	TB SSB	ER F	
9. BONGANWA [Bonga North West Africa]	TB SSB	ER F	TB SSB	ER F	
10. BRMSPPCWACIV-BEN [Seabream Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F	
11. BRMSPPCWAGAB-AGO [Seabream Central West Africa Gabon-Angola]	TB SSB	ER F	TB SSB	ER F	
12. BRMSPPCWAGIN-LBR [Seabream Central West Africa Guinea-Liberia]	TB SSB	ER F	TB SSB	ER F	
13. CATCWAGAB [Catfish Central West Africa Gabon]	TB SSB	ER F	TB SSB	ER F	
14. CATCWAGIN-LBR [Catfish Central West Africa Guinea-Liberia]	TB SSB	ER F	TB SSB	ER F	
15. CHMACKCWAGAB-AGO [Cunene horse mackerel Central West Africa Gabon-Angola]	TB SSB	ER F	TB SSB	ER F	
16. CHMACKCWAGNB-LBR [Cunene horse mackerel Central West Africa Guinea Bissau-Liberia]	TB SSB	ER F	TB SSB	ER F	
17. CHMACKNWA [Cunene horse mackerel North West Africa]	TB SSB	ER F	TB SSB	ER F	
18. CMACKNWA [Chub mackerel North West Africa]	TB SSB	ER F	TB SSB	ER F	
19. CROAKSPPCWACIV-BEN [Croaker Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F	
20. CROAKSPPCWAGAB-AGO [Croaker Central West Africa Gabon-Angola]	TB SSB	ER F	TB SSB	ER F	
21. CROAKSPPCWAGIN-LBR [Croaker Central West Africa Guinea-Liberia]	TB SSB	ER F	TB SSB	ER F	
22. CSHRIMPCWA [Coastal shrimp Central West Africa]	TB SSB	ER F	TB SSB	ER F	
23. CUTTLECWAGHA [Cuttlefish Central West Africa Ghana]	TB SSB	ER F	TB SSB	ER F	
24. DRSHRIMPCWA [Deep water rose shrimp Central West Africa]	TB SSB	ER F	TB SSB	ER F	
25. GGRUNTCWAGAB-AGO [Grey grunt Central West Africa Gabon-Angola]	TB SSB	ER F	TB SSB	ER F	

26. GGRUNTCWAGIN-LBR [Grey grunt Central West Africa Guinea-Liberia]	TB SSB	ER F	TB SSB	ER F
27. HAKENWAMAR [Hake North West Africa Morocco]	TB SSB	ER F	TB SSB	ER F
28. HAKESPPNWA [Hake spp North West Africa]	TB SSB	ER F	TB SSB	ER F
29. HMACKNWA [Horse mackerel North West Africa]	TB SSB	ER F	TB SSB	ER F
30. LDENTCWAAGO [Large eye dentex Central West Africa Angola]	TB SSB	ER F	TB SSB	ER F
31. MSARDCWACIV-BEN [Madeiran sardinella Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F
32. MSARDNWA [Madeiran sardinella North West Africa]	TB SSB	ER F	TB SSB	ER F
33. OCTOCWAGNB [Octopus Central West Africa Guinea Bissau]	TB SSB	ER F	TB SSB	ER F
34. RPANDCWACIV-BEN [Red pandora Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F
35. RSARDCWACIV-BEN [Round sardinella Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F
36. RSARDNWA [Round sardinella North West Africa]	TB SSB	ER F	TB SSB	ER F
37. SARDINCWAGAB-AGO [Sardinella Central West Africa Gabon-Angola]	TB SSB	ER F	TB SSB	ER F
38. SARDINCWAGNB-LBR [Sardinella Central West Africa Guinea Bissau-Liberia]	TB SSB	ER F	TB SSB	ER F
39. SARDNWAZAB [Sardine North West Africa Zone A+B]	TB SSB	ER F	TB SSB	ER F
40. SARDNWAZC [Sardine North West Africa Zone C]	TB SSB	ER F	TB SSB	ER F
41. SCADSPPCWAGNB-LBR [Scad spp Central West Africa Guinea Bissau-Liberia]	TB SSB	ER F	TB SSB	ER F
42. SOLECWAAGO [Sole Central West Africa Angola]	TB SSB	ER F	TB SSB	ER F
43. SOLECWAGNB-GIN [Sole Central West Africa Guinea Bissau-Guinea]	TB SSB	ER F	TB SSB	ER F
44. SPSHRIMPCWA [Southern pink shrimp Central West Africa]	TB SSB	ER F	TB SSB	ER F
45. THREADCWACIV-BEN [Threadfin Central West Africa Cote Divoire-Benin]	TB SSB	ER F	TB SSB	ER F
46. THREADCWAGAB-AGO [Threadfin Central West Africa Gabon-Angola]	TB SSB	ER F	TB SSB	ER F
47. THREADCWAGIN-LBR [Threadfin Central West Africa Guinea-Liberia]	TB SSB	ER F	TB SSB	ER F

## Anchovy Central West Africa Cote Divoire-Benin [ANCHOCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Engraulis encrasicolus
<b>Current Assess ID</b>	FAO-SPNWA-ANCHOCWACIV-BEN-1990-2017-ASHBROOK
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

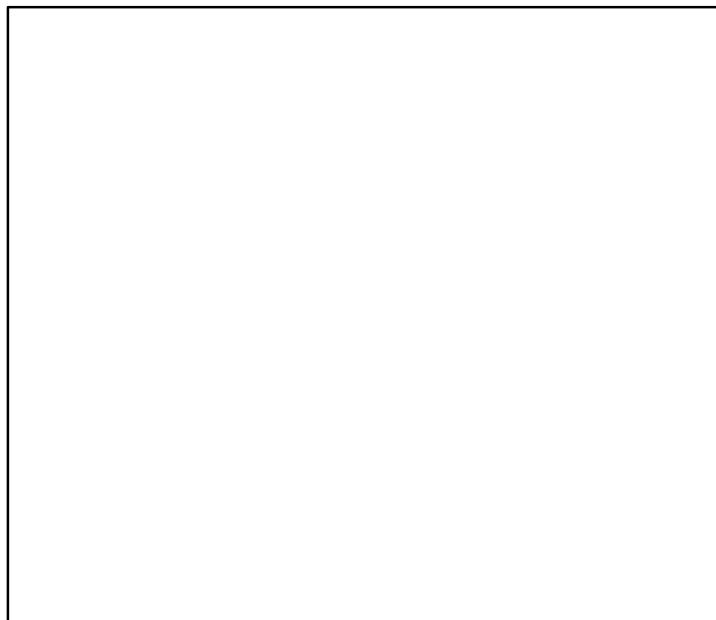
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	49,713		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	0.44		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	1.37		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



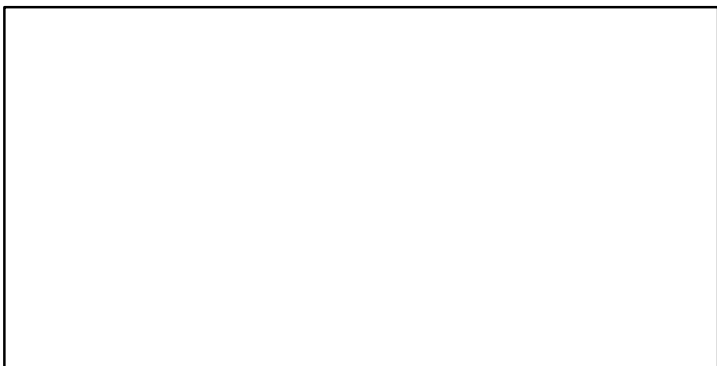
**Production\***



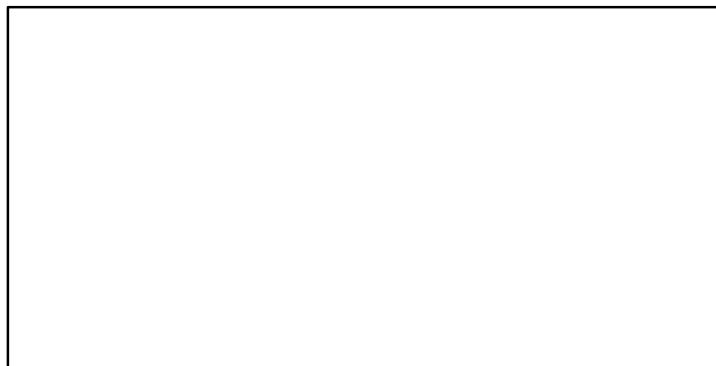
◆ Start Year ◆ End Year \* No Data

Anchovy Central West Africa Cote Divoire–Benin [ANCHOCWACIV–BEN]

**TB\***



**SSB\***



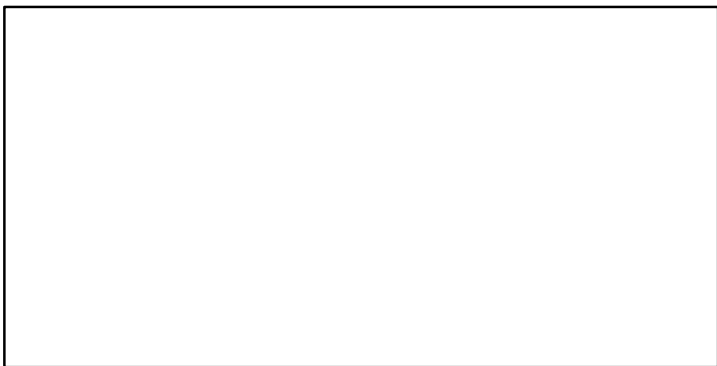
**TN \***



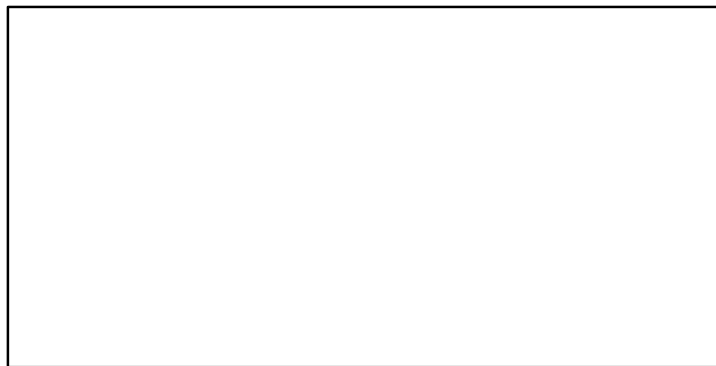
**F\***



**ER\***

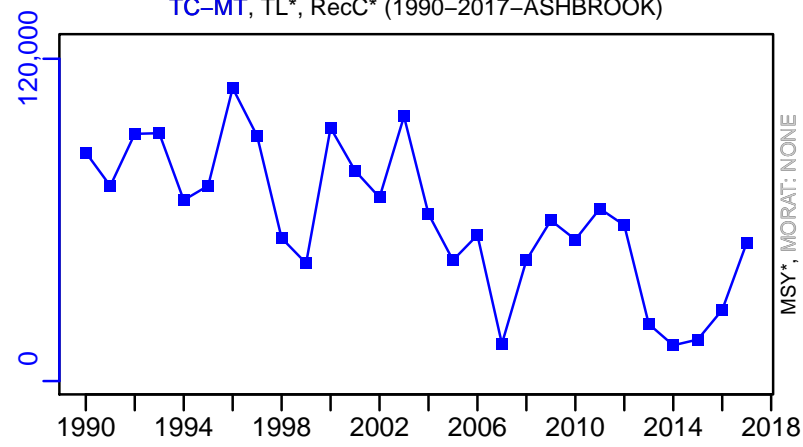


**Recruits\***



# Anchovy Central West Africa Cote Divoire–Benin [ANCHOCWACIV–BEN]

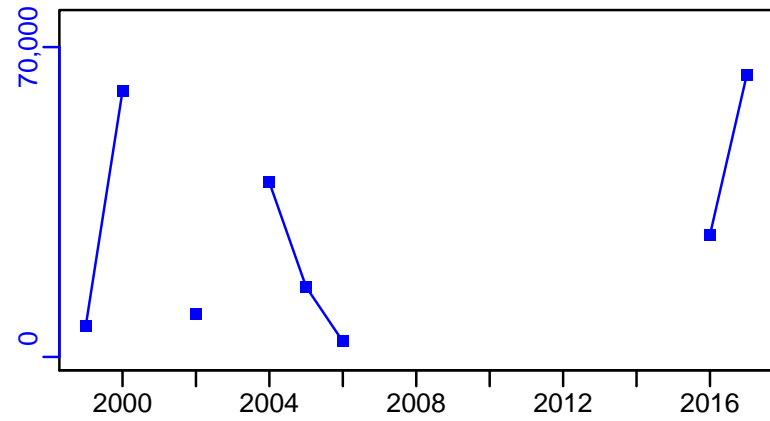
TC–MT, TL\*, RecC\* (1990–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_absolute–MT (1990–2017–ASHBROOK)



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Anchovy Central West Africa Gabon-Angola [ANCHOCWAGAB-AGO]

Metadata	
<b>Scientific Name</b>	Engraulis encrasicolus
<b>Current Assess ID</b>	FAO-SPNWA-ANCHOCWAGAB-AGO-1995-2017-ASHBROOK
<b>Area</b>	Central West Africa Gabon-Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	372		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	0.23		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	1.22		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

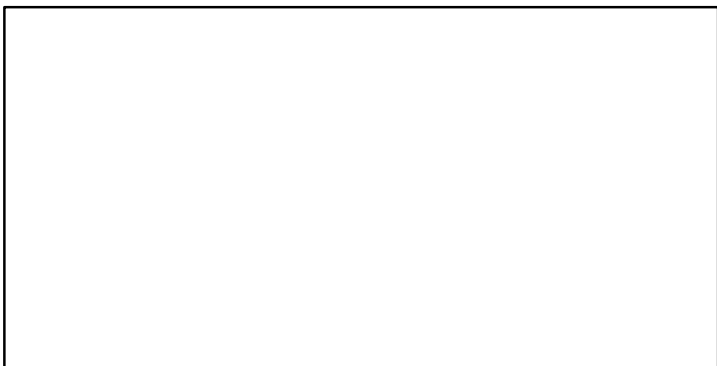


◆ Start Year ◆ End Year \* No Data

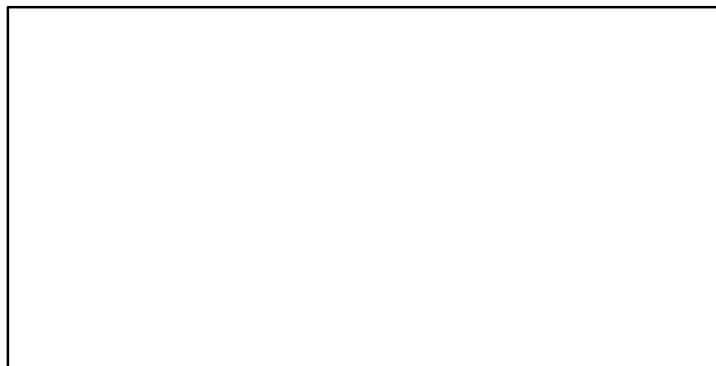


Anchovy Central West Africa Gabon–Angola [ANCHOCWAGAB–AGO]

**TB\***



**SSB\***



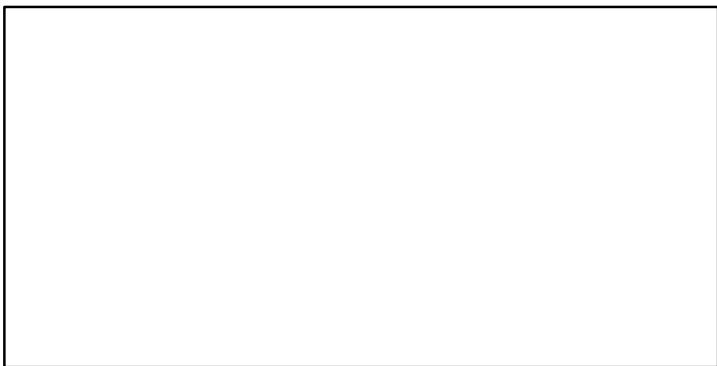
**TN \***



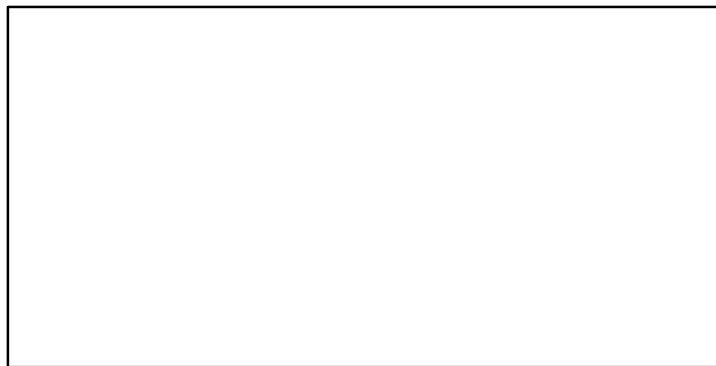
**F\***



**ER\***

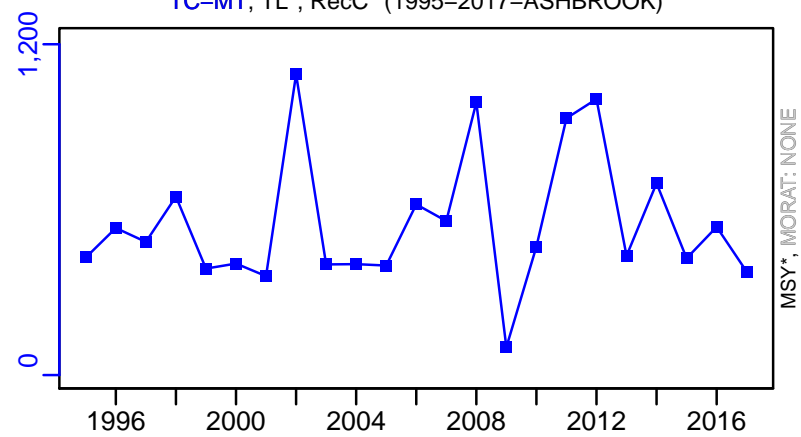


**Recruits\***



# Anchovy Central West Africa Gabon–Angola [ANCHOCWAGAB-AGO]

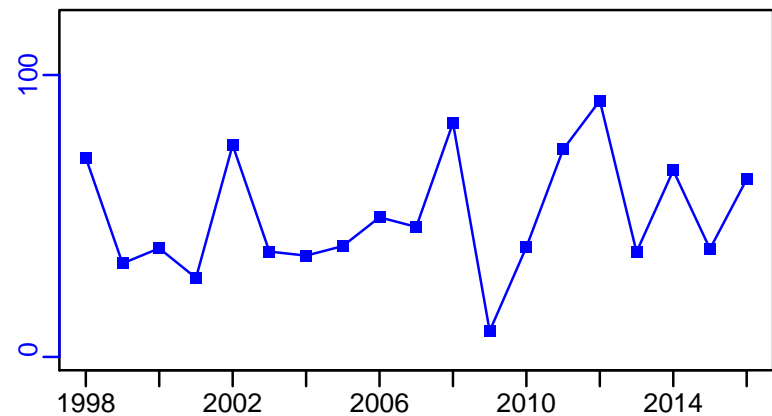
TC–MT, TL\*, RecC\* (1995–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



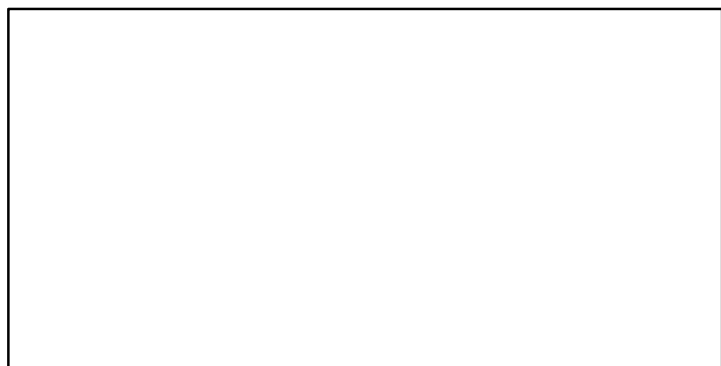
survB\_index–index (1995–2017–ASHBROOK)



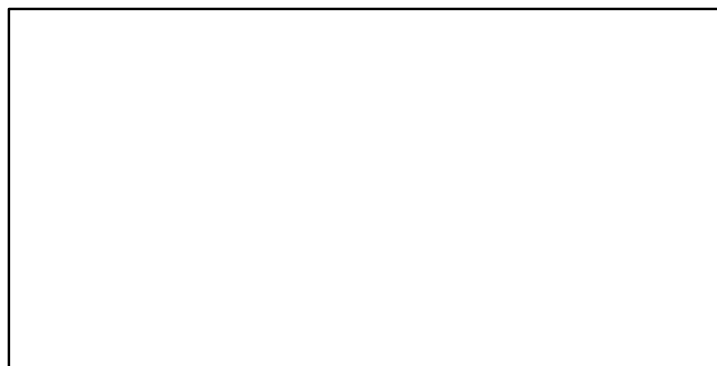
CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Anchovy North West Africa [ANCHONWA]

Metadata	
<b>Scientific Name</b>	Engraulis encrasicolus
<b>Current Assess ID</b>	FAO-SPNWA-ANCHONWA-1990-2016-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2010, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	1.35
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	143,000	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2010	0.84	-	-
<b>ER</b>	ER-calc-ratio	2010	0.839	-	-
<b>TC</b>	TC-MT	2016	28,566		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

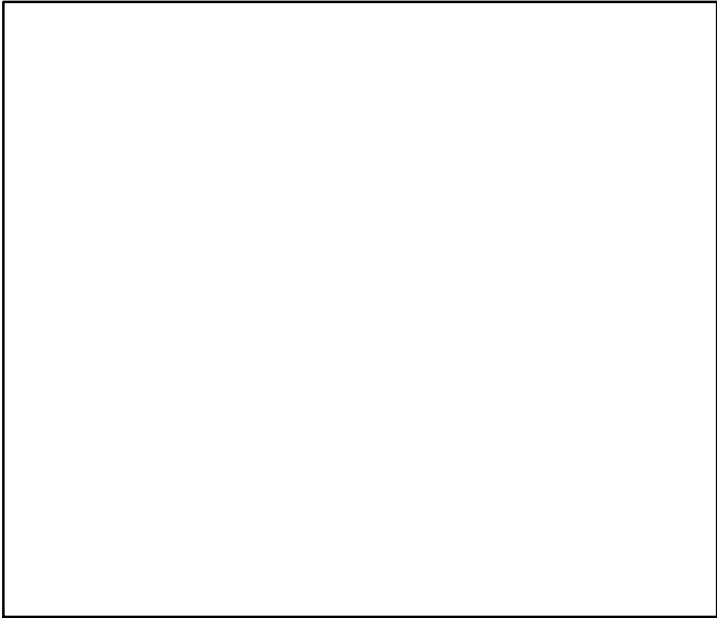
Kobe MSY\*



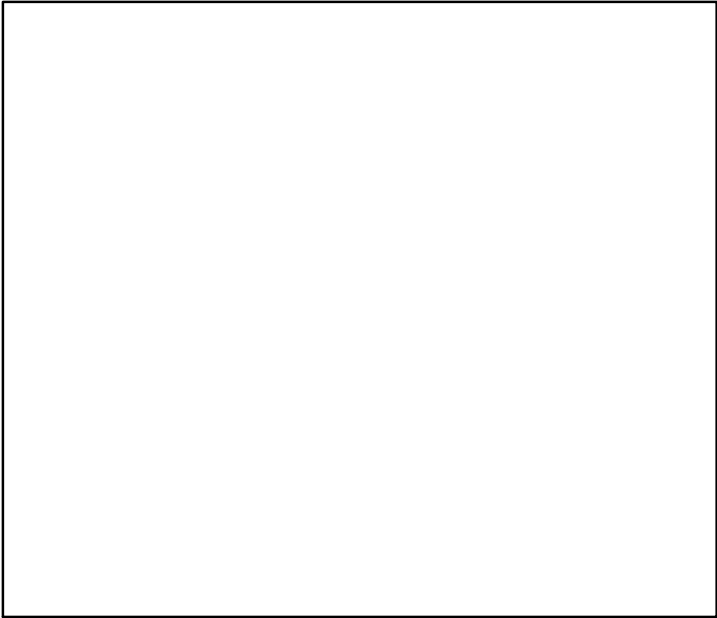
Kobe MGT\*



Spawner Recruit\*

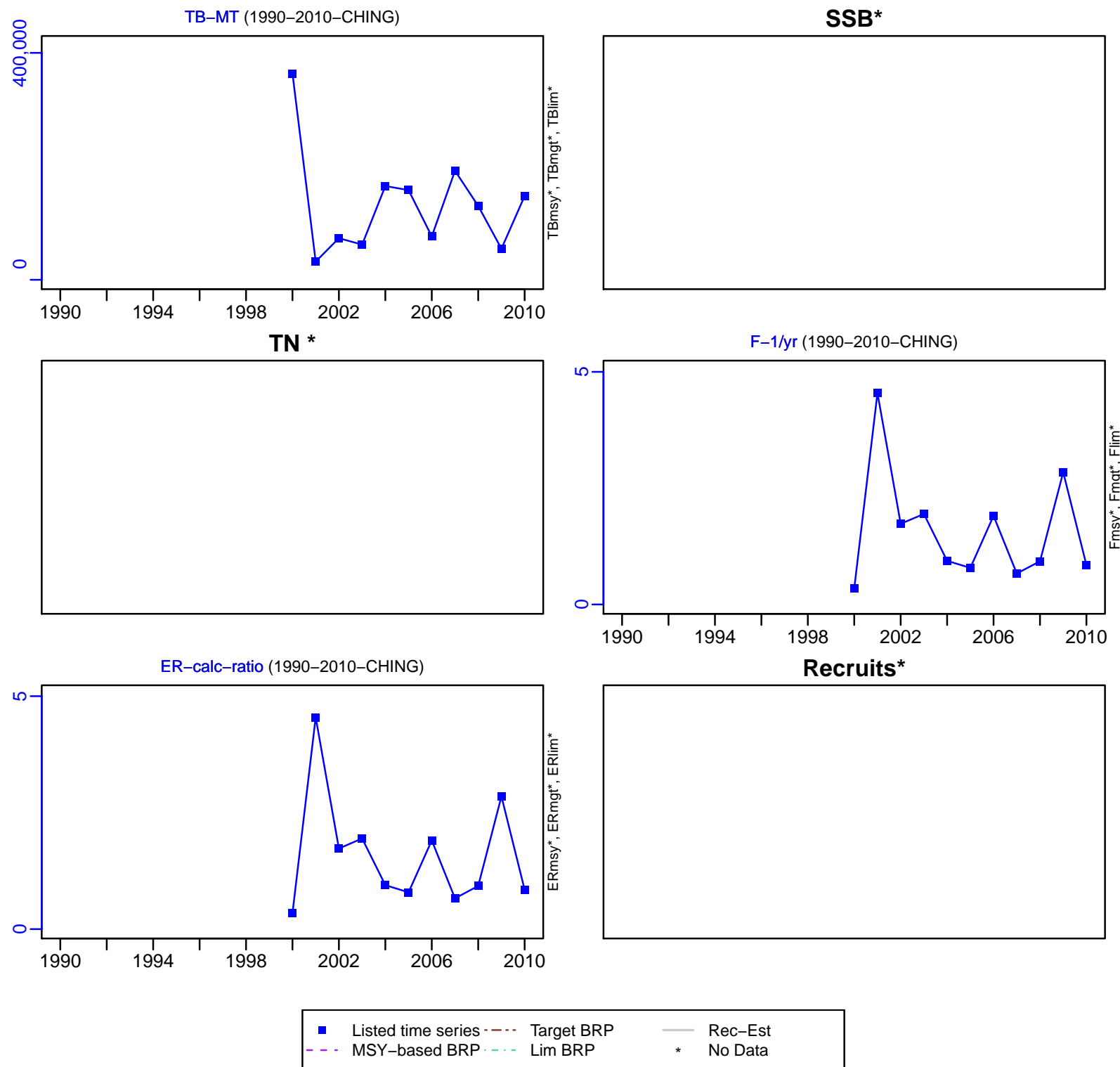


Production\*



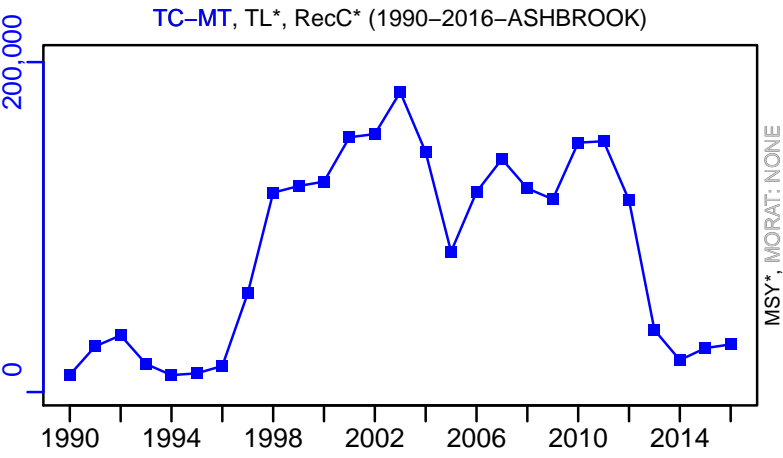
◆ Start Year   ◆ End Year   \* No Data

# Anchovy North West Africa [ANCHONWA]



# Anchovy North West Africa [ANCHONWA]

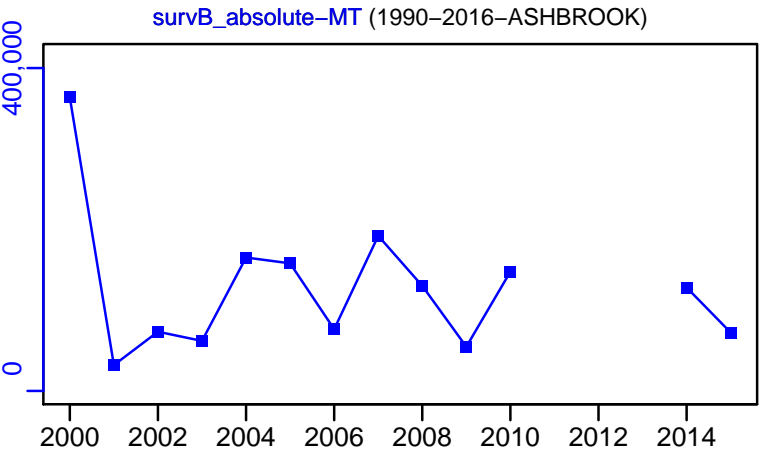
TC-MT, TL\*, RecC\* (1990-2016-ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_absolute-MT (1990-2016-ASHBROOK)



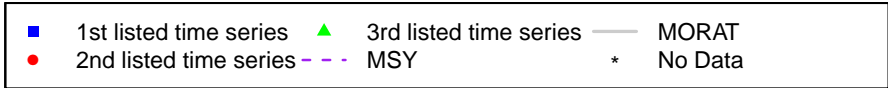
CPUE\*



EFFORT\*



CdivMSY\*



## Bobo croaker Central West Africa Guinea-Liberia [BCROAKCWAGIN-LBR]

Metadata	
<b>Scientific Name</b>	Pseudotolithus elongatus
<b>Current Assess ID</b>	FAO-DR-BCROAKCWAGIN-LBR-1994-2007-CHING
<b>Area</b>	Central West Africa Guinea-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	9070		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*

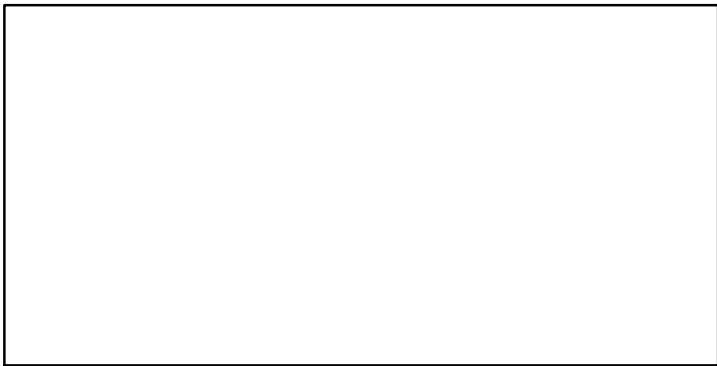


◆ Start Year ◆ End Year \* No Data

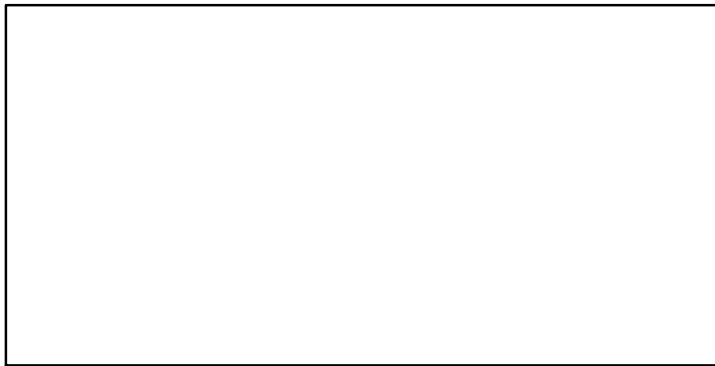


Bobo croaker Central West Africa Guinea–Liberia [BCROAKCWAGIN–LBR]

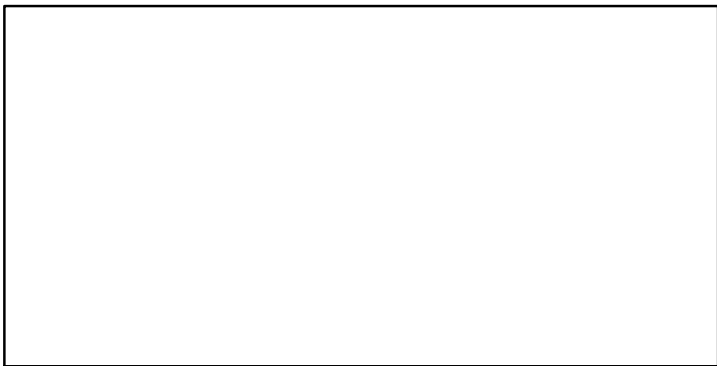
**TB\***



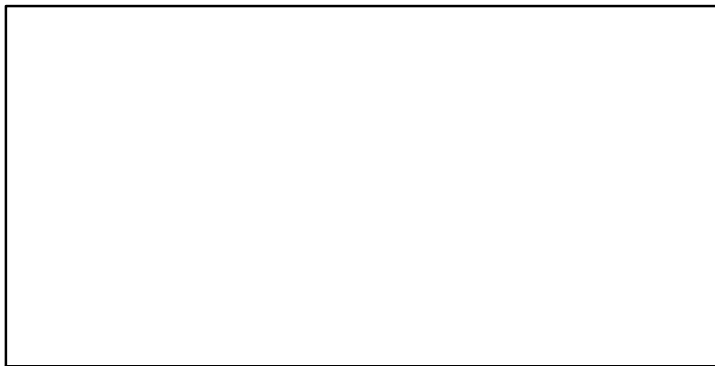
**SSB\***



**TN \***



**F\***



**ER\***



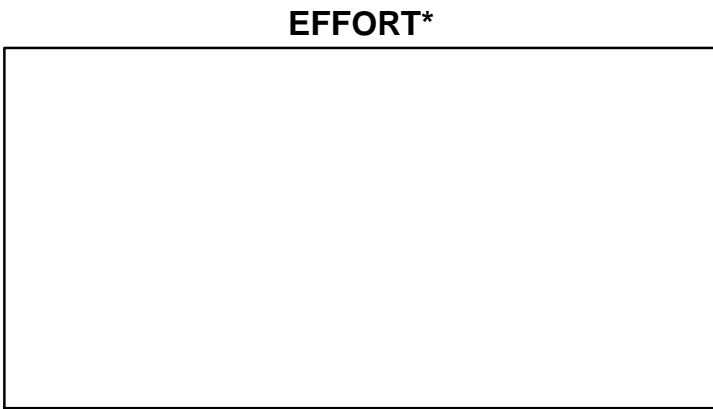
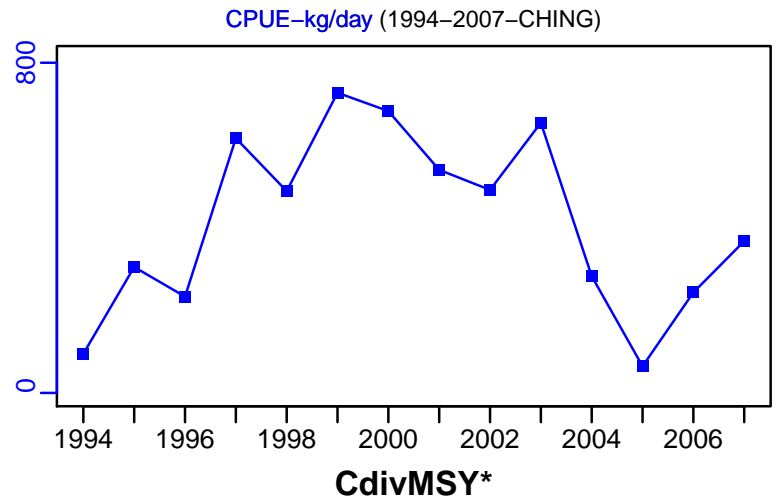
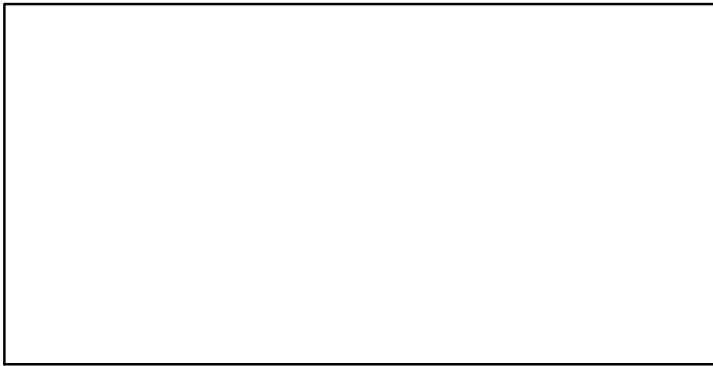
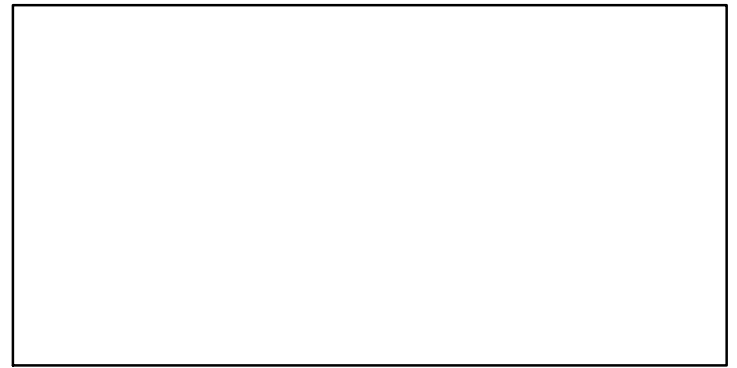
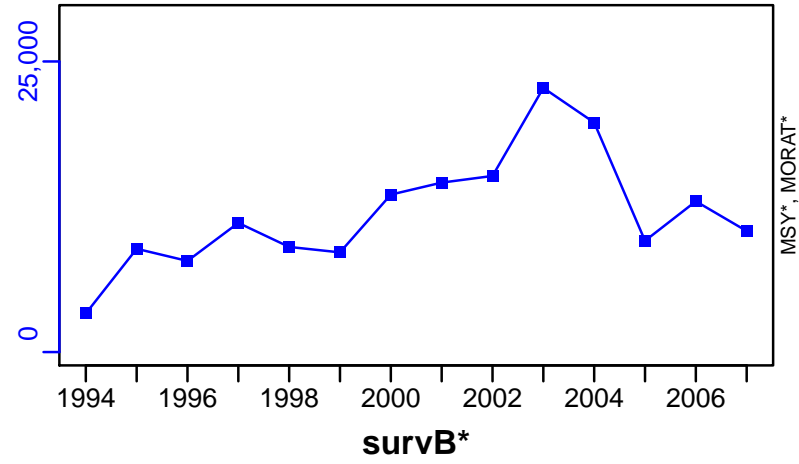
**Recruits\***



# Bobo croaker Central West Africa Guinea-Liberia [BCROAKCWAGIN-LBR]

TC-MT, TL\*, RecC\* (1994-2007-CHING)

TAC\*, Cpair\*, Cadv\*



## Bigeye grunt Central West Africa Cote Divoire-Benin [BGRUNTCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Brachydeuterus auritus
<b>Current Assess ID</b>	FAO-DR-BGRUNTCWACIV-BEN-1990-2006-CHING
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2006

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2006	21,400		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

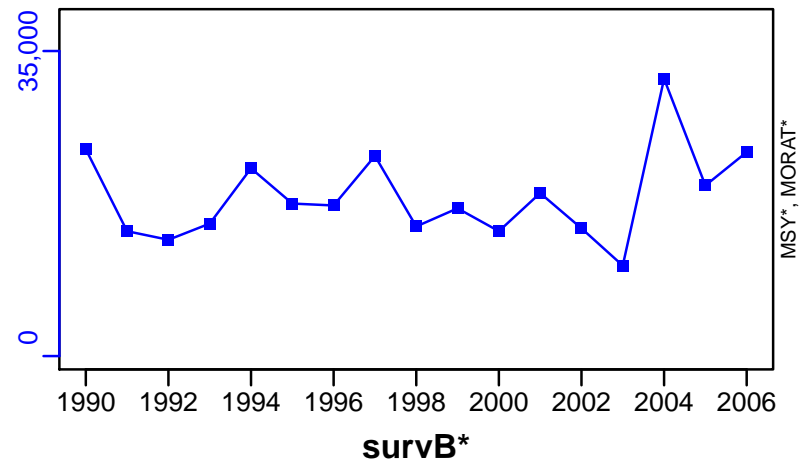


Recruits\*



# Bigeye grunt Central West Africa Cote Divoire–Benin [BGRUNTCWACIV–BEN]

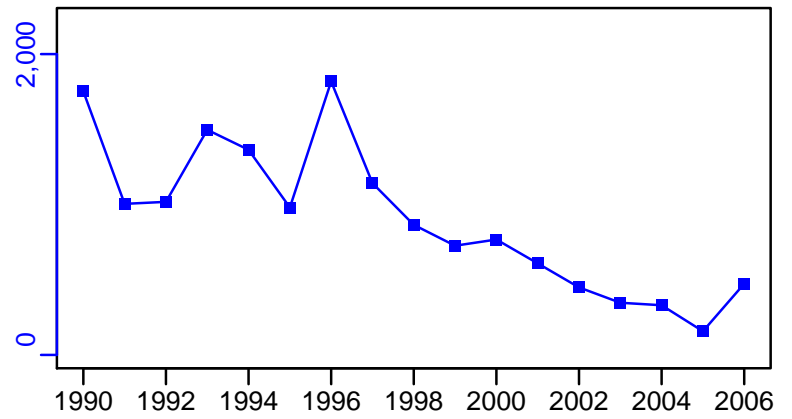
TC–MT, TL\*, RecC\* (1990–2006–CHING)



TAC\*, Cpair\*, Cadv\*



CPUE–kg/day (1990–2006–CHING)



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Bigeye grunt Central West Africa Congo\_Angola [BGRUNTCWACOG\_AGO]

Metadata	
<b>Scientific Name</b>	Brachydeuterus auritus
<b>Current Assess ID</b>	FAO-DR-BGRUNTCWACOG_AGO-1995-2007-CHING
<b>Area</b>	Central West Africa Congo_Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	144	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	4790		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

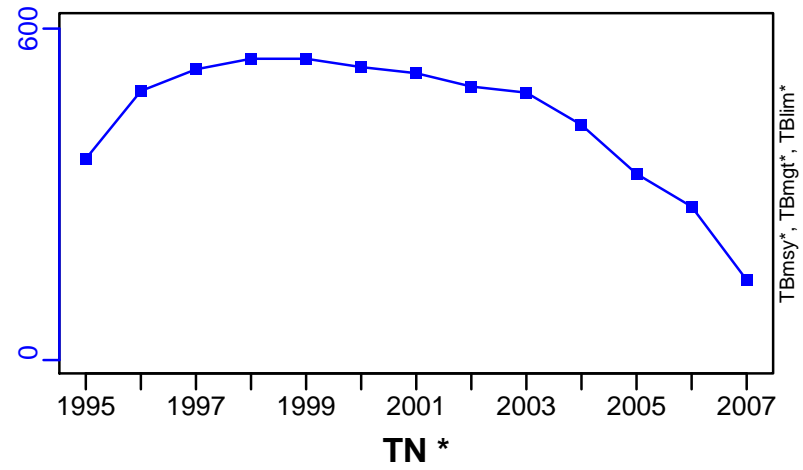


◆ Start Year ◆ End Year \* No Data



Bigeye grunt Central West Africa Congo\_Angola [BGRUNTCWACOG\_AGO]

TB-index (1995–2007–CHING)



SSB\*



F\*



ER\*



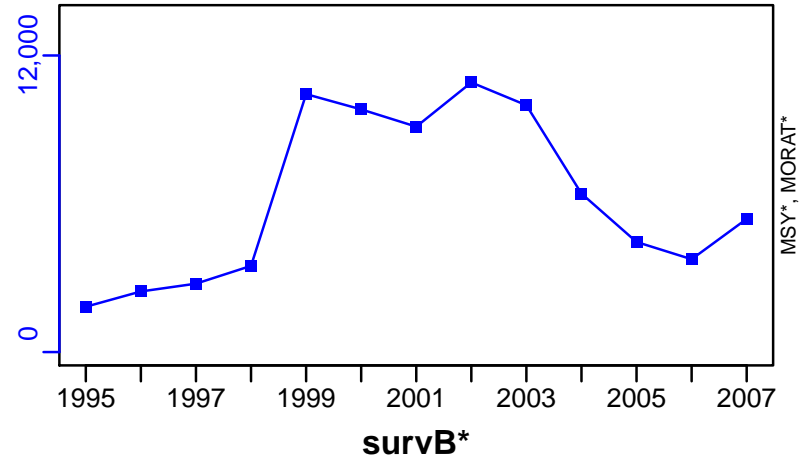
Recruits\*



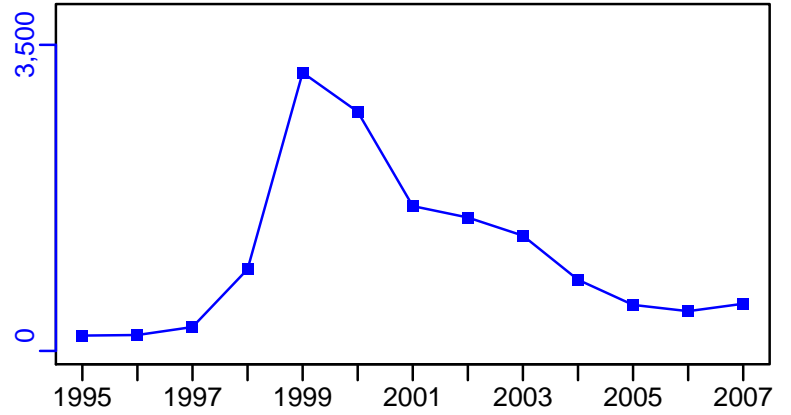
# Bigeye grunt Central West Africa Congo\_Angola [BGRUNTCWACOG\_AGO]

TC-MT, TL\*, RecC\* (1995-2007-CHING)

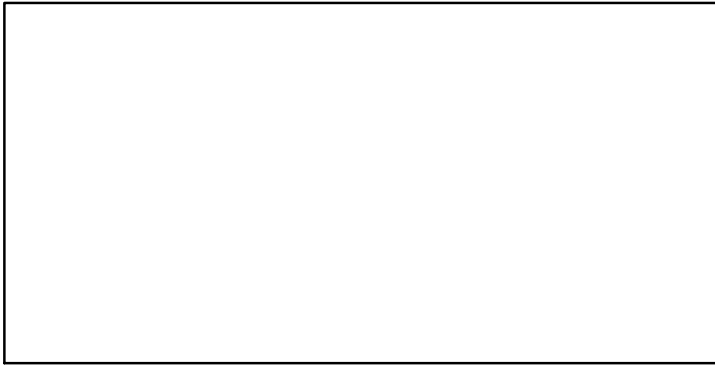
TAC\*, Cpair\*, Cadv\*



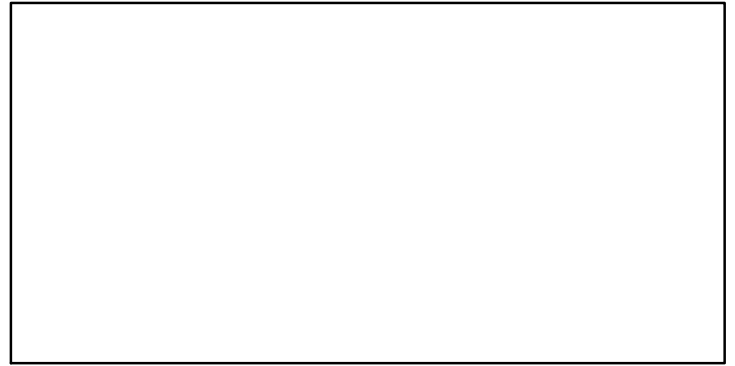
CPUE-kg/day (1995-2007-CHING)



EFFORT\*



CdivMSY\*



## Benguela hake Central West Africa Angola [BHAKECWAAGO]

Metadata	
<b>Scientific Name</b>	Merluccius polli
<b>Current Assess ID</b>	FAO-DR-BHAKECWAAGO-1994-2010-ASHBROOK
<b>Area</b>	Central West Africa Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2010, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2010	4675		
TL	-	-	-		
TB/TBmsy	TBdivTBmsy-dimensionless	2010	1.81		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2010	0.42		
TB/TBmgt	TBdivTBmgt-dimensionless	2010	1.65		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

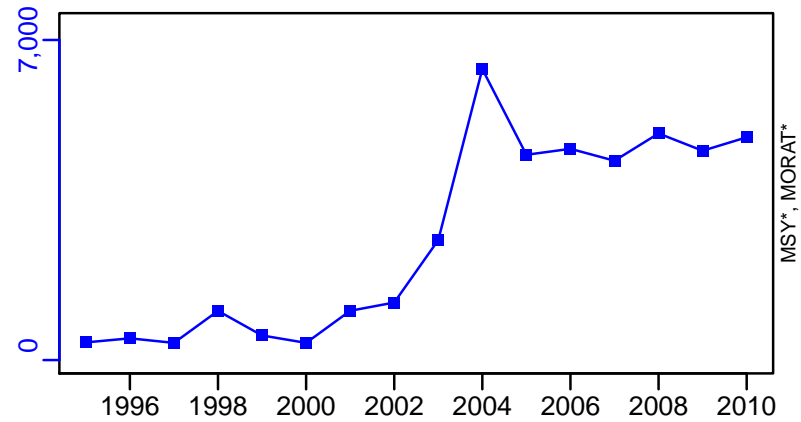


Recruits\*



# Benguela hake Central West Africa Angola [BHAKECWAAGO]

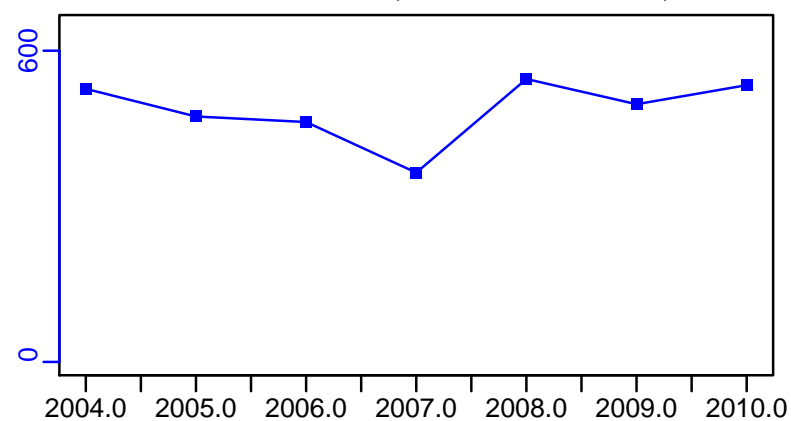
TC-MT, TL\*, RecC\* (1994-2010-ASHBROOK)



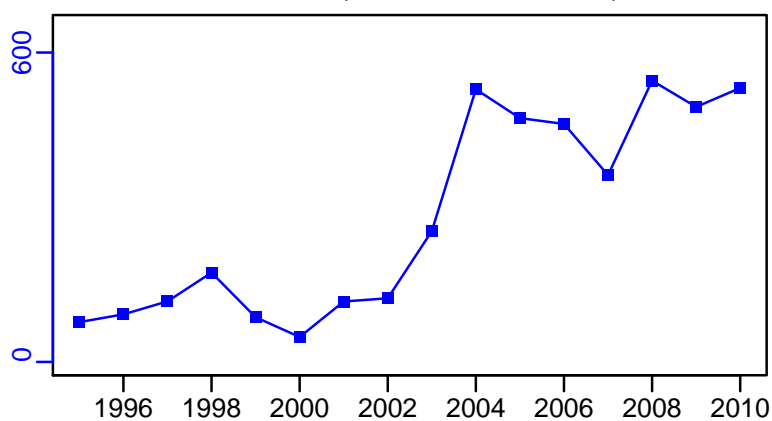
TAC\*, Cpair\*, Cadv\*



survB\_index-1-index (1994-2010-ASHBROOK)



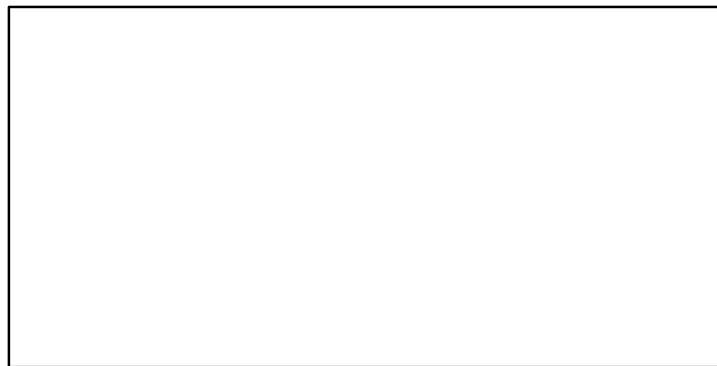
CPUE-index (1994-2010-ASHBROOK)



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Bonga Central West Africa Gabon-Congo DR [BONGACWAGAB-COD]

Metadata	
<b>Scientific Name</b>	Ethmalosa fimbriata
<b>Current Assess ID</b>	FAO-SPNWA-BONGACWAGAB-COD-1995-2017-ASHBROOK
<b>Area</b>	Central West Africa Gabon-Congo DR
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

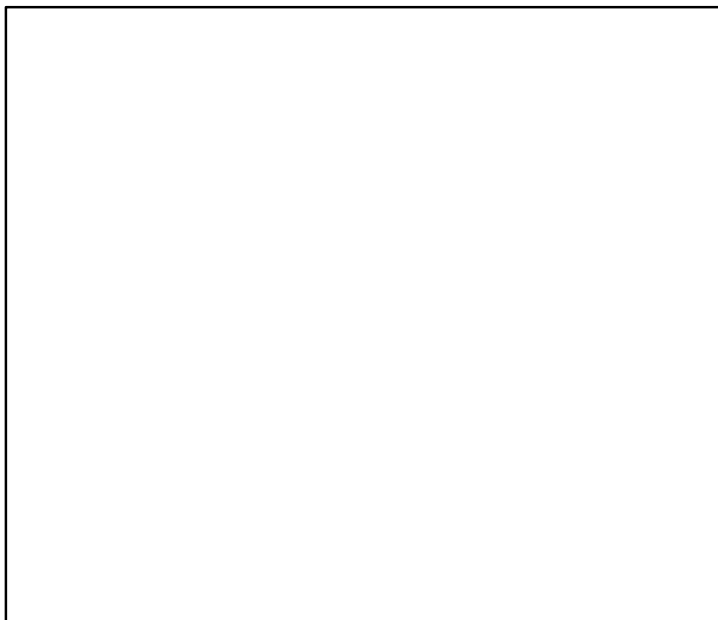
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	3370		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	0.16		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	1.34		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

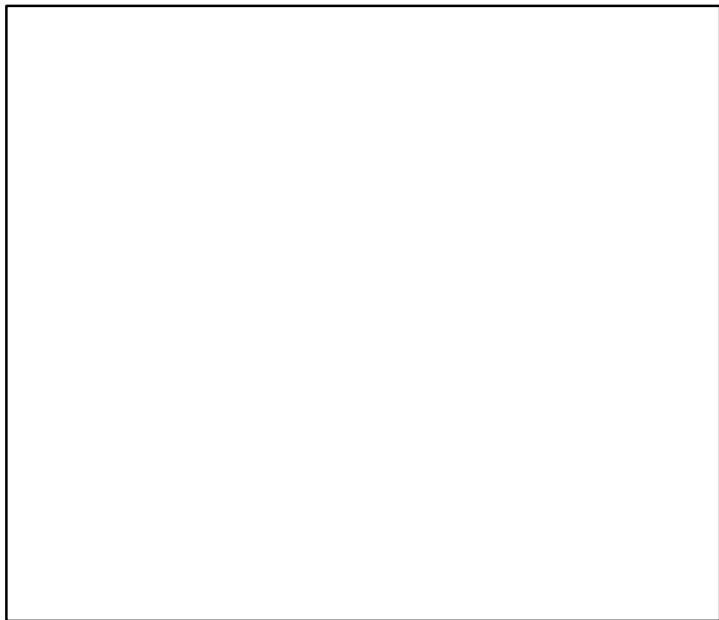
**Kobe MSY\***



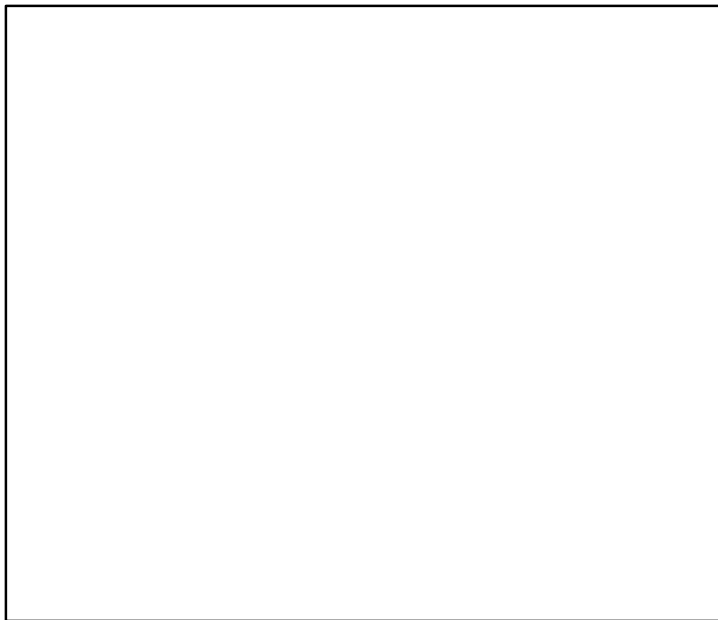
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data



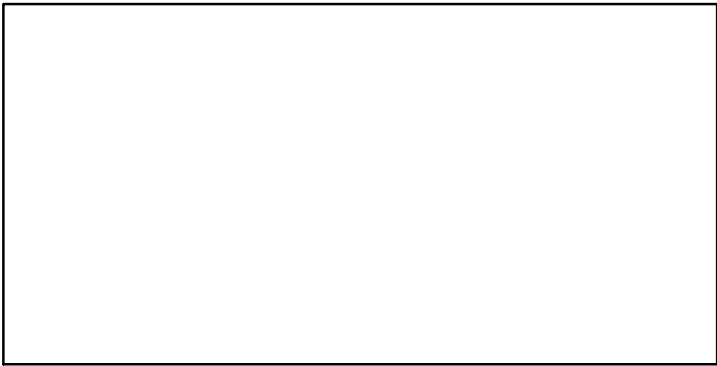
**TB\***



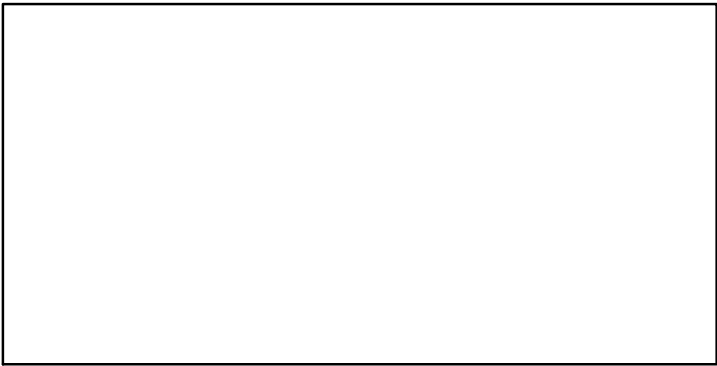
**SSB\***



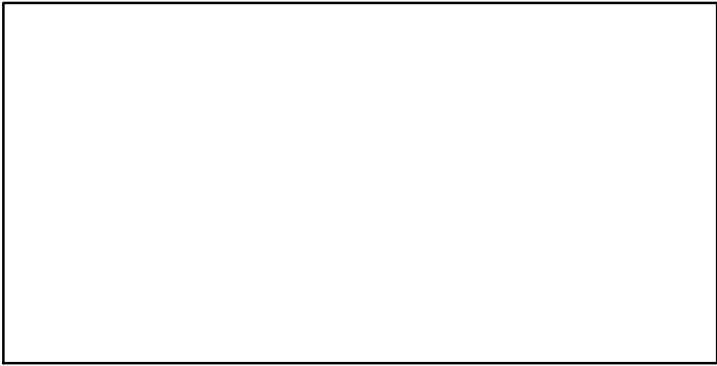
**TN \***



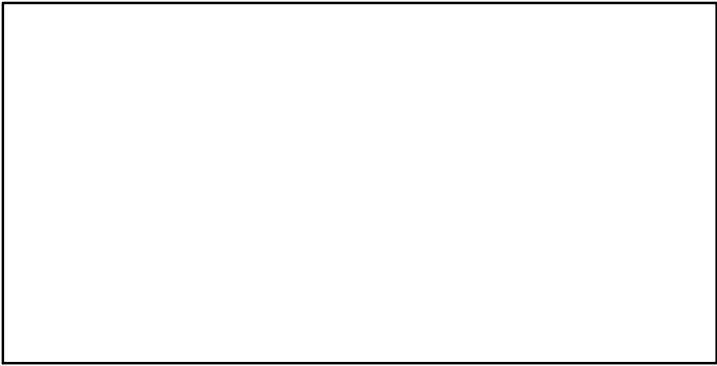
**F\***



**ER\***

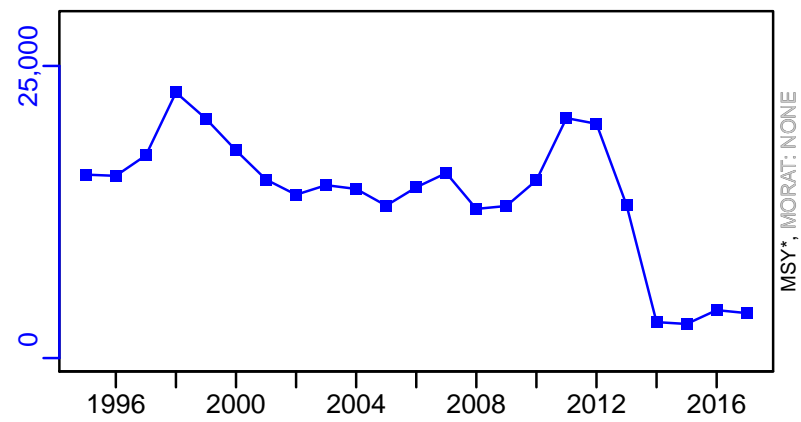


**Recruits\***



# Bonga Central West Africa Gabon-Congo DR [BONGACWAGAB-COD]

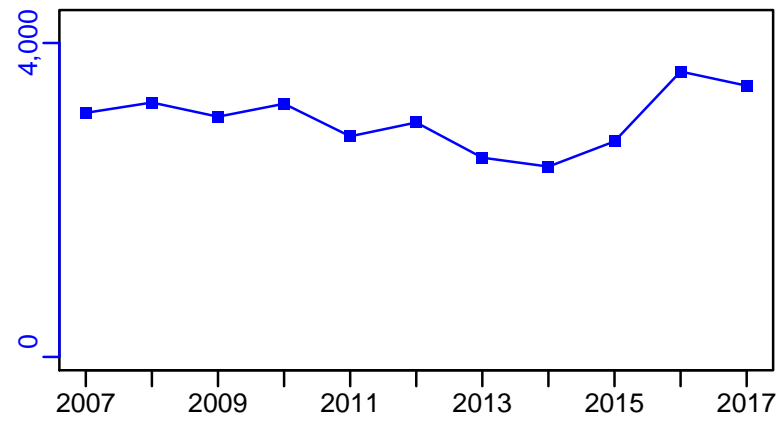
TC-MT, TL\*, RecC\* (1995-2017-ASHBROOK)



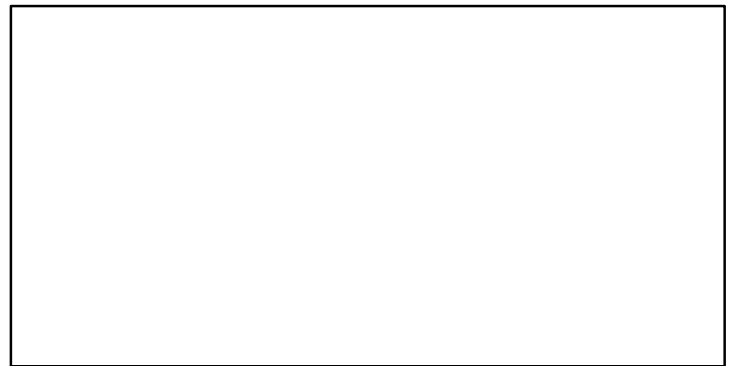
TAC\*, Cpair\*, Cadv\*



survB\_index-index (1995-2017-ASHBROOK)



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

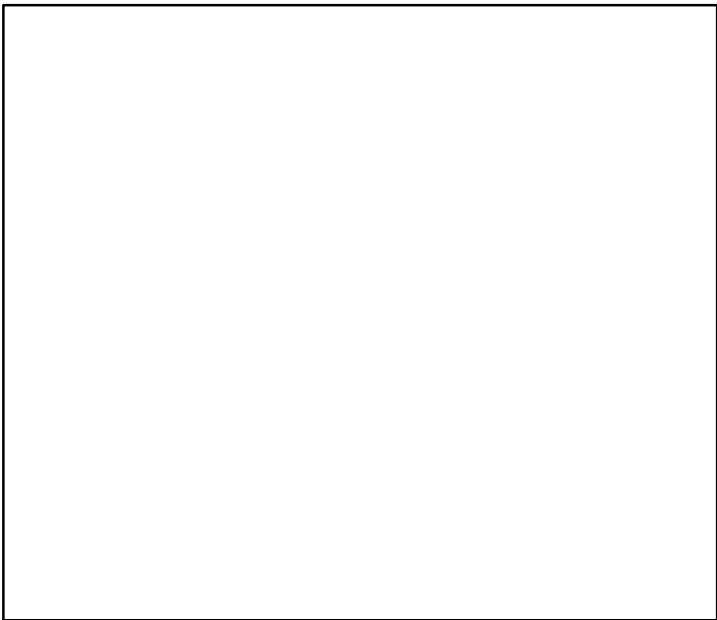
## Bonga North West Africa [BONGANWA]

Metadata	
<b>Scientific Name</b>	Ethmalosa fimbriata
<b>Current Assess ID</b>	FAO-SPNWA-BONGANWA-1990-2016-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2010, 2016

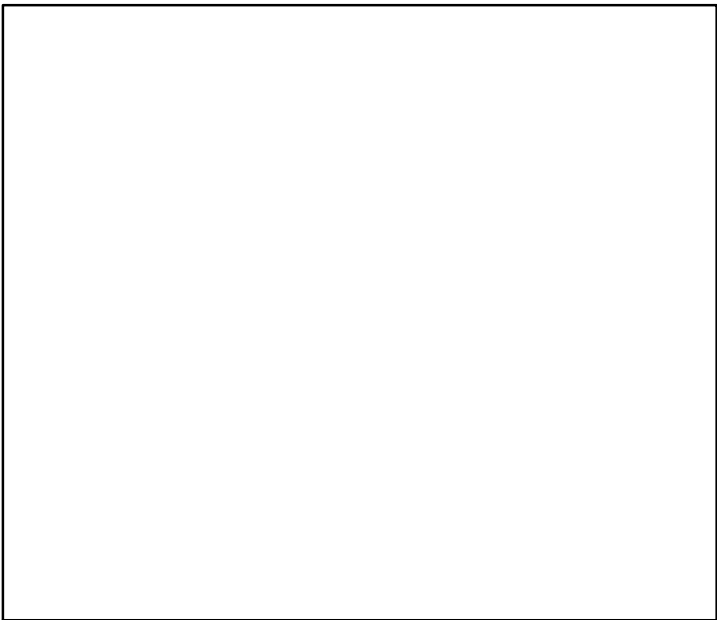
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2016	0.4
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	67,544		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

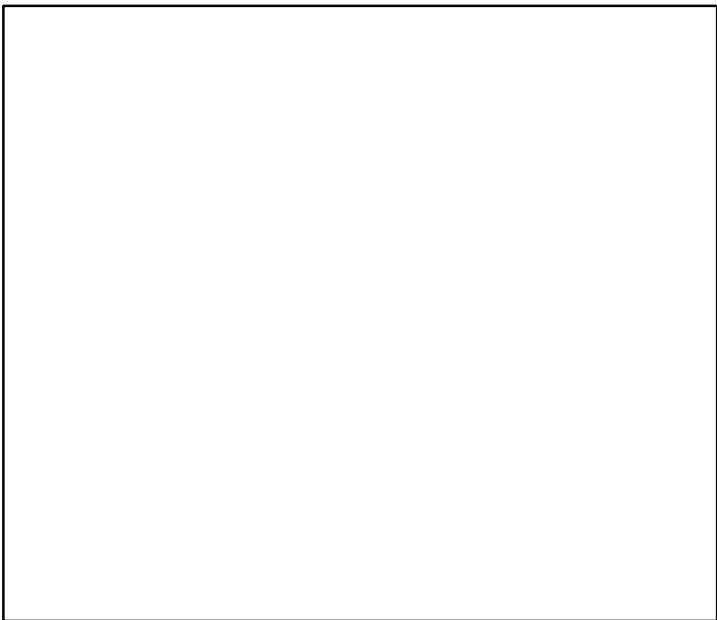
Kobe MSY\*



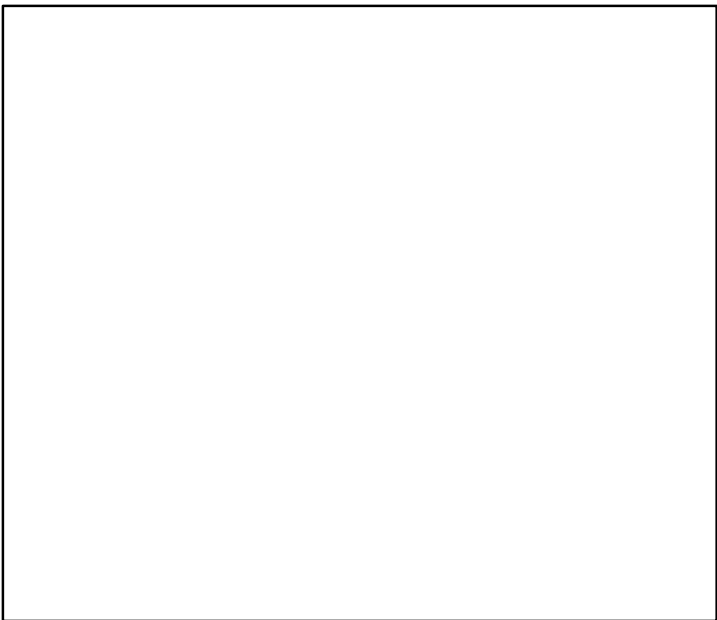
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*



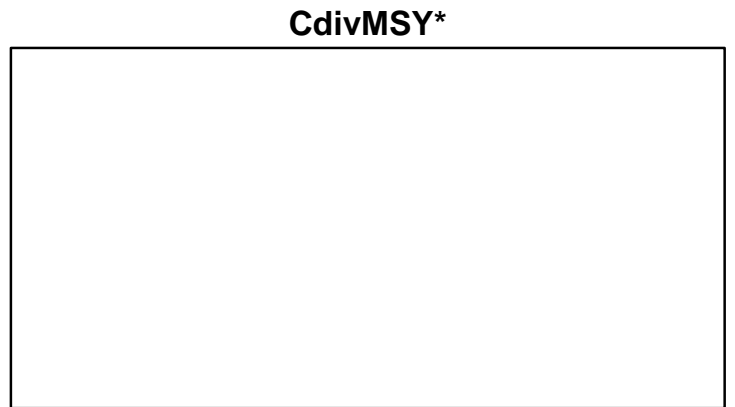
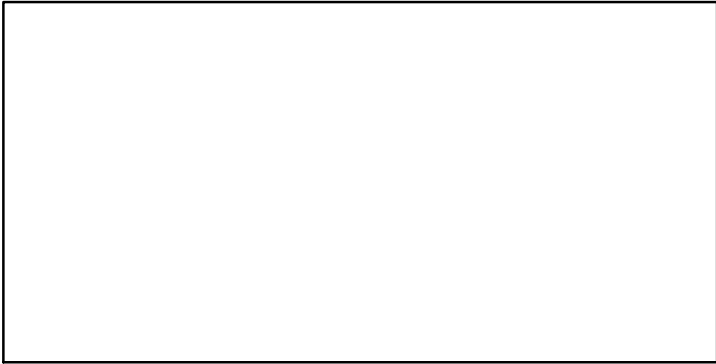
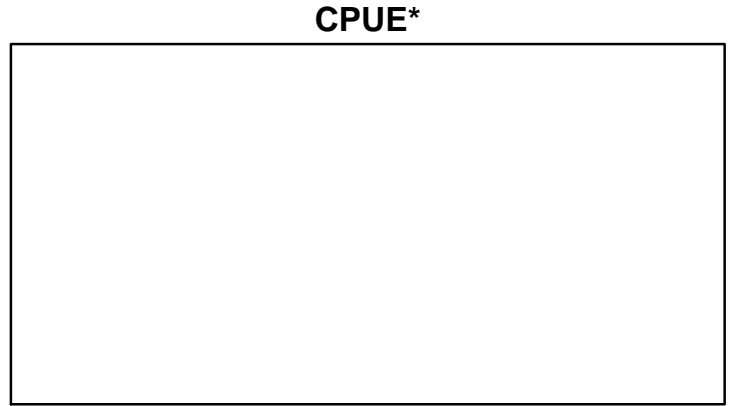
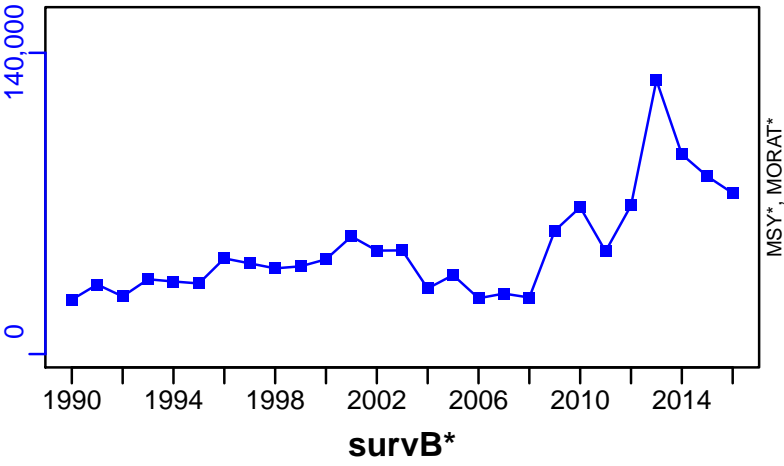
Recruits\*



# Bonga North West Africa [BONGANWA]

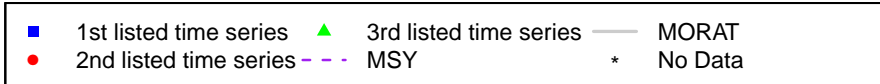
TC-MT, TL\*, RecC\* (1990-2016-ASHBROOK)

TAC\*, Cpair\*, Cadv\*



EFFORT\*

CdivMSY\*



## Seabream Central West Africa Cote Divoire-Benin [BRMSPPCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Dentex spp
<b>Current Assess ID</b>	FAO-DR-BRMSPPCWACIV-BEN-1990-2007-CHING
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

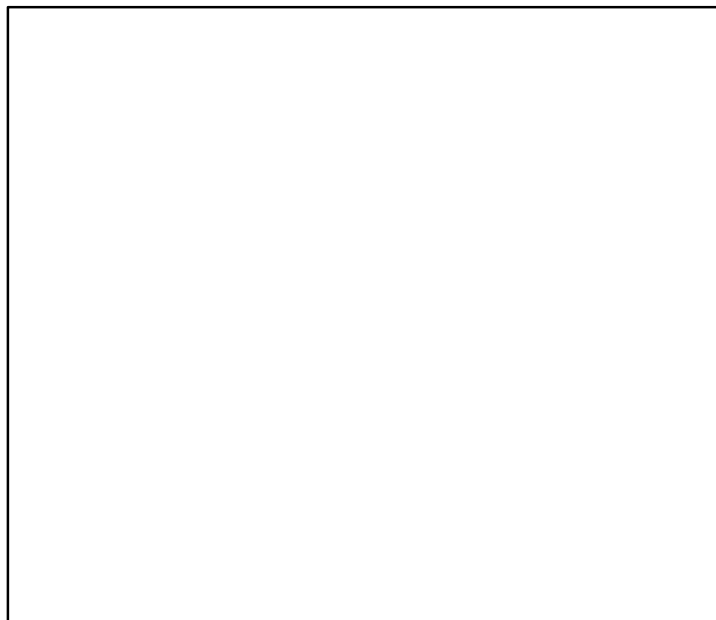
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	24	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	9450		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



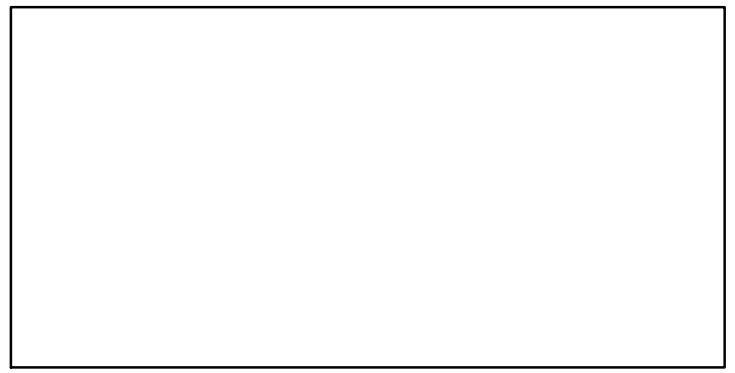
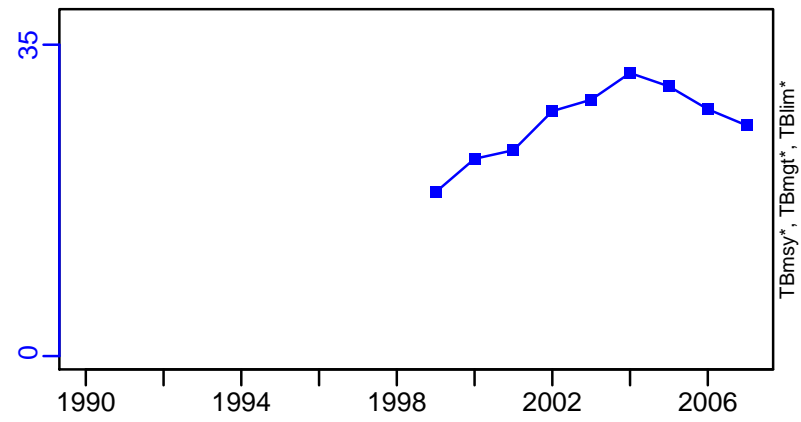
◆ Start Year ◆ End Year \* No Data



# Seabream Central West Africa Cote Divoire–Benin [BRMSPPCWACIV–BEN]

TB–index (1990–2007–CHING)

SSB\*



TN \*

F\*



ER\*

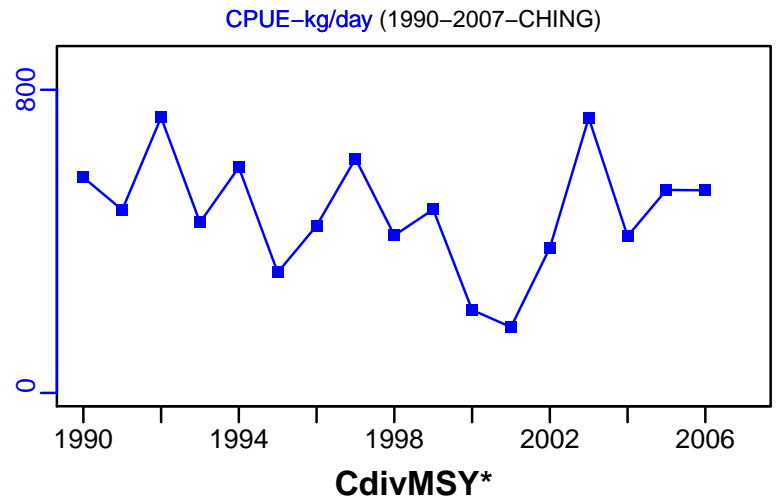
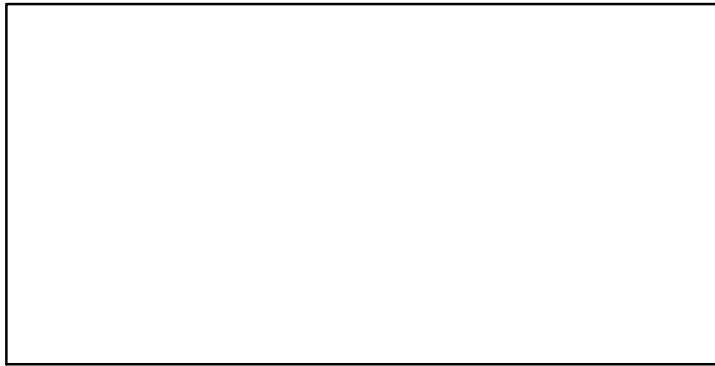
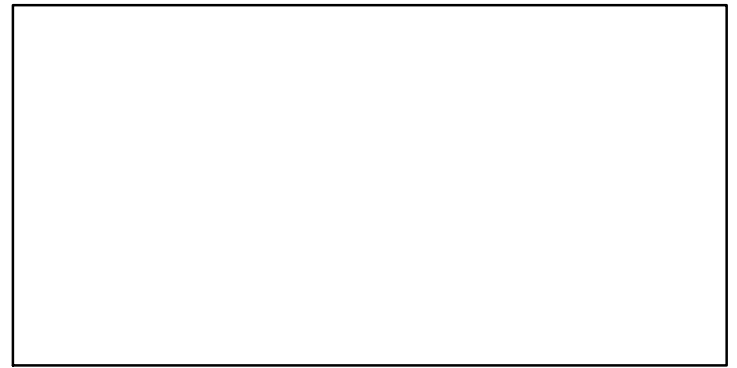
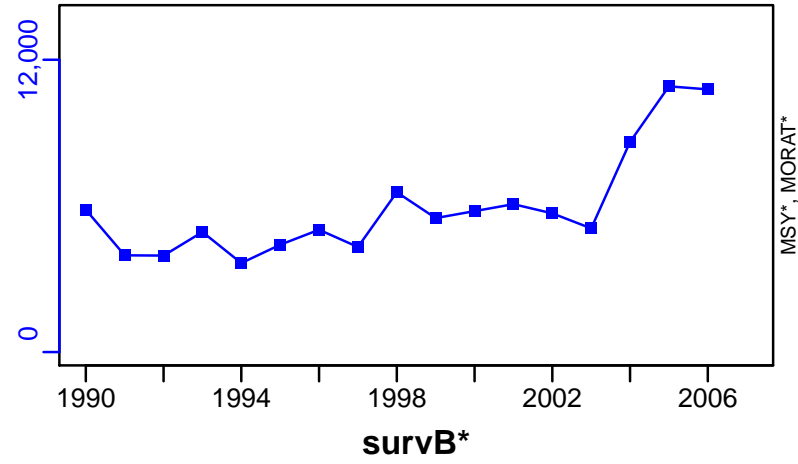
Recruits\*



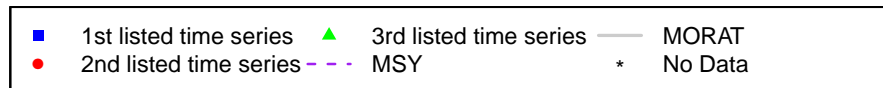
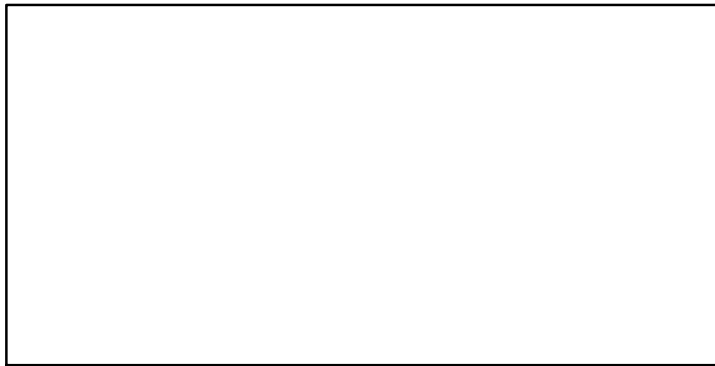
# Seabream Central West Africa Cote Divoire–Benin [BRMSPPCWACIV–BEN]

TC–MT, TL\*, RecC\* (1990–2007–CHING)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Seabream Central West Africa Gabon-Angola [BRMSPPCWAGAB-AGO]

Metadata	
<b>Scientific Name</b>	Dentex spp
<b>Current Assess ID</b>	FAO-DR-BRMSPPCWAGAB-AGO-1995-2007-CHING
<b>Area</b>	Central West Africa Gabon-Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	154	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	13,300		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



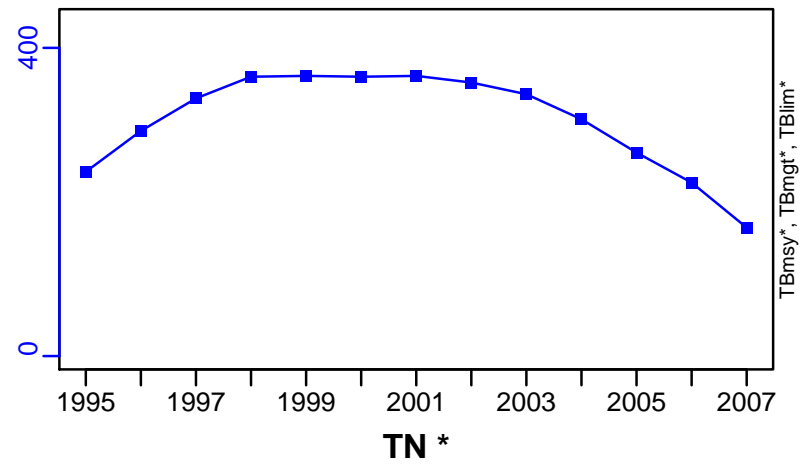
**Production\***



◆ Start Year ◆ End Year \* No Data

# Seabream Central West Africa Gabon–Angola [BRMSPPCWAGAB–AGO]

TB-index (1995–2007–CHING)



SSB\*



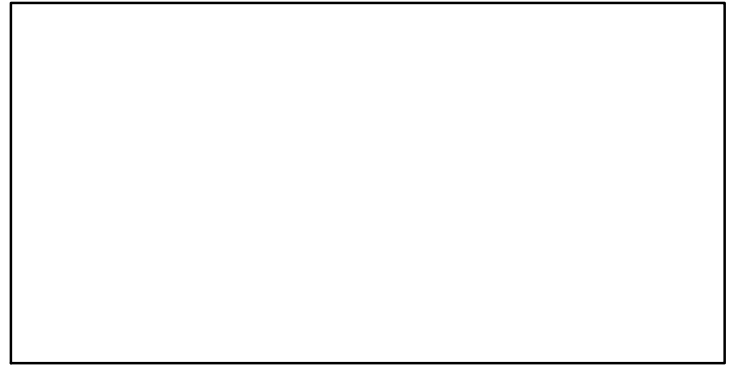
F\*



ER\*



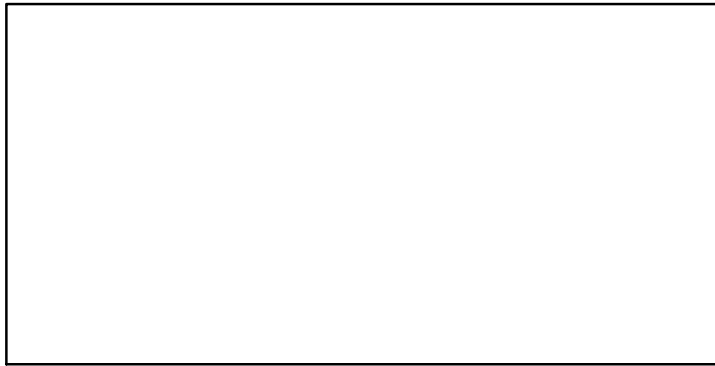
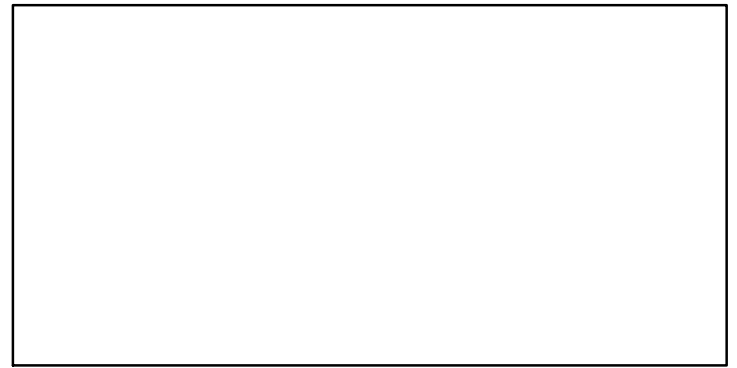
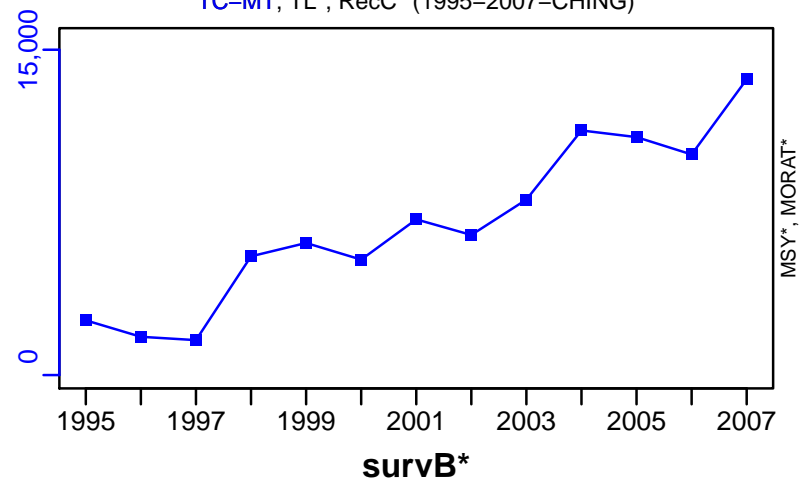
Recruits\*



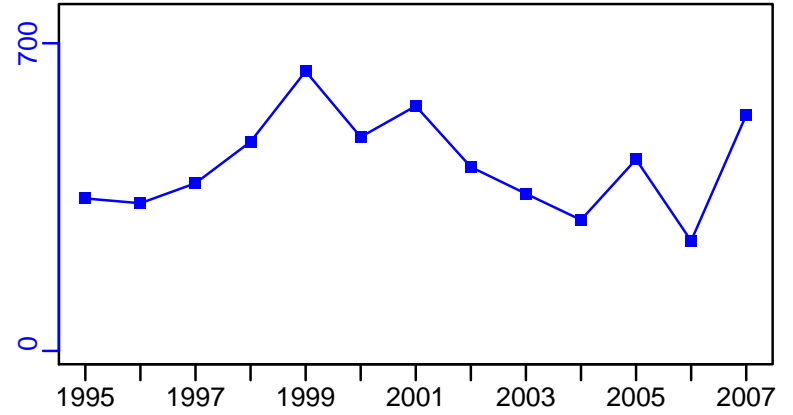
# Seabream Central West Africa Gabon–Angola [BRMSPPCWAGAB–AGO]

TC–MT, TL\*, RecC\* (1995–2007–CHING)

TAC\*, Cpair\*, Cadv\*

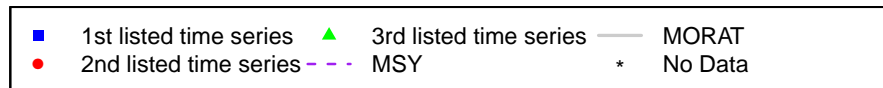


CPUE–kg/day (1995–2007–CHING)



EFFORT\*

CdivMSY\*



## Seabream Central West Africa Guinea-Liberia [BRMSPPCWAGIN-LBR]

Metadata	
<b>Scientific Name</b>	Dentex spp
<b>Current Assess ID</b>	FAO-DR-BRMSPPCWAGIN-LBR-1994-2007-CHING
<b>Area</b>	Central West Africa Guinea-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	4910		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

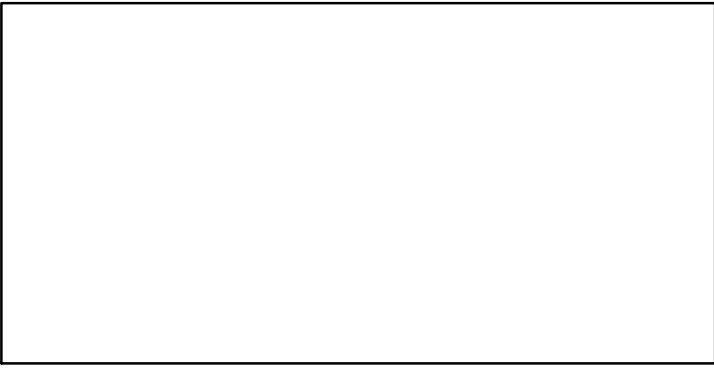


◆ Start Year   ◆ End Year   \* No Data

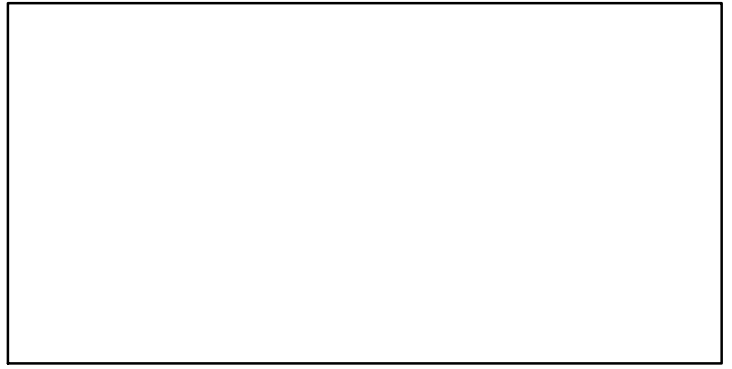


Seabream Central West Africa Guinea–Liberia [BRMSPPCWAGIN–LBR]

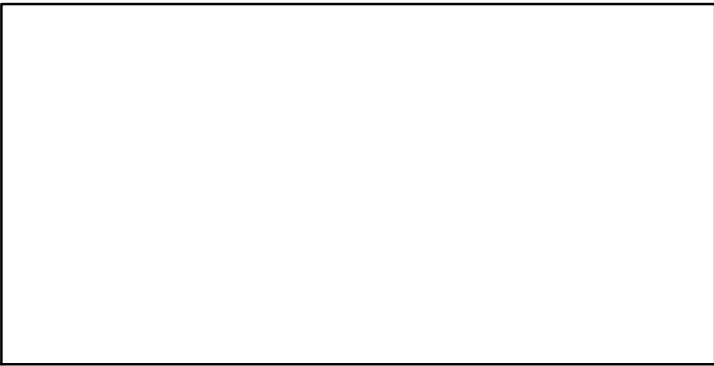
**TB\***



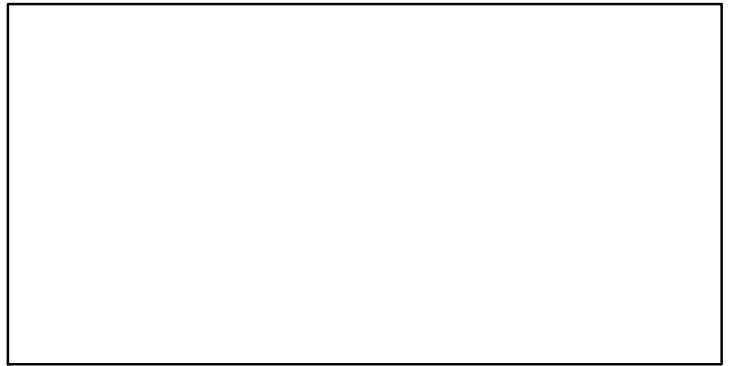
**SSB\***



**TN \***



**F\***



**ER\***



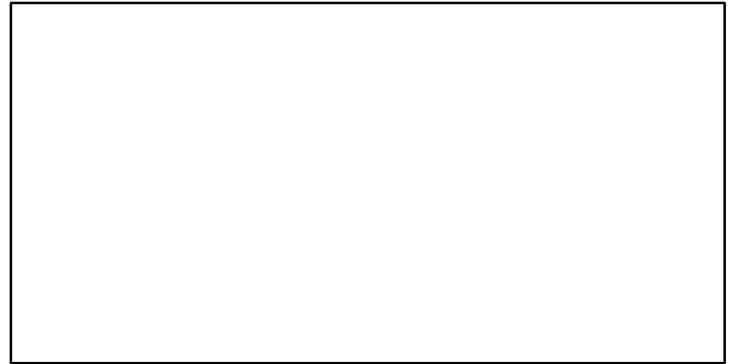
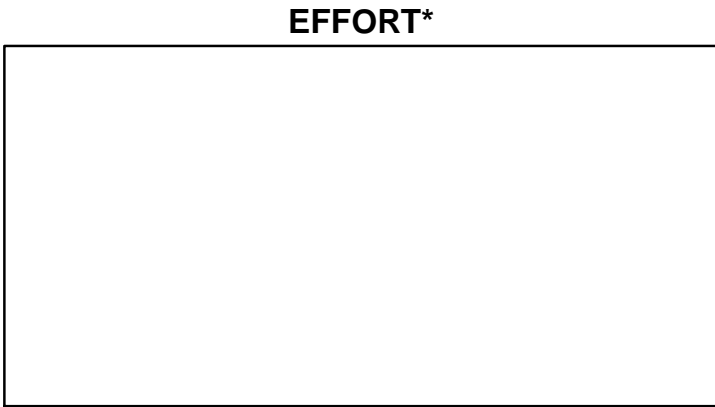
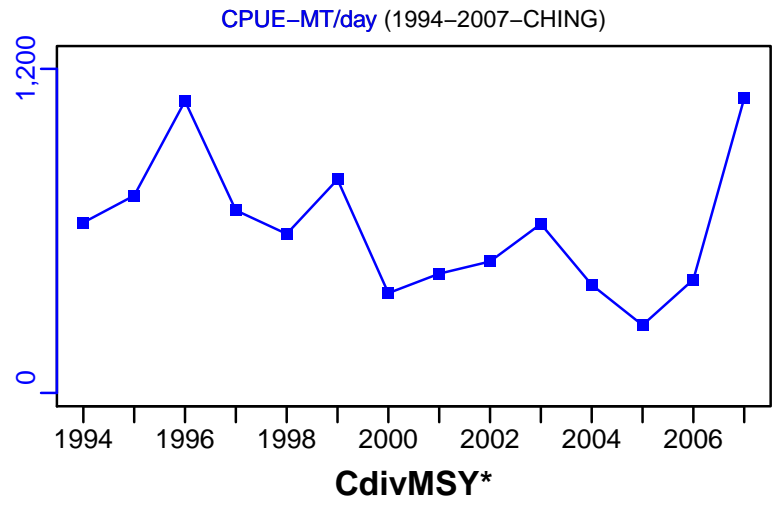
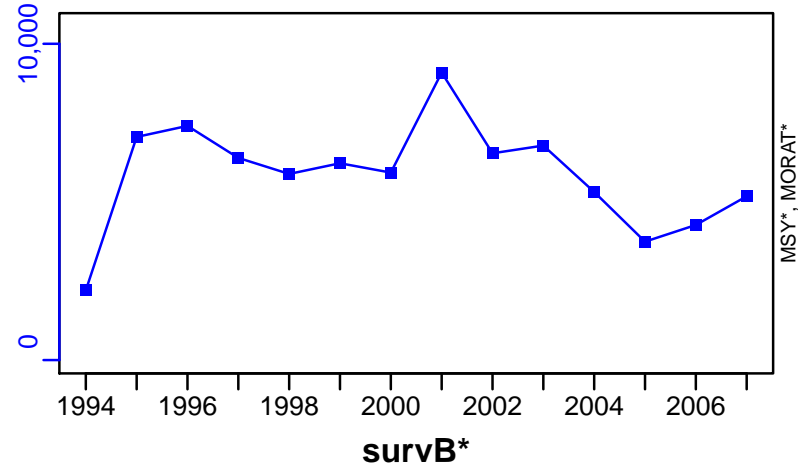
**Recruits\***



# Seabream Central West Africa Guinea-Liberia [BRMSPPCWAGIN-LBR]

TC-MT, TL\*, RecC\* (1994-2007-CHING)

TAC\*, Cpair\*, Cadv\*



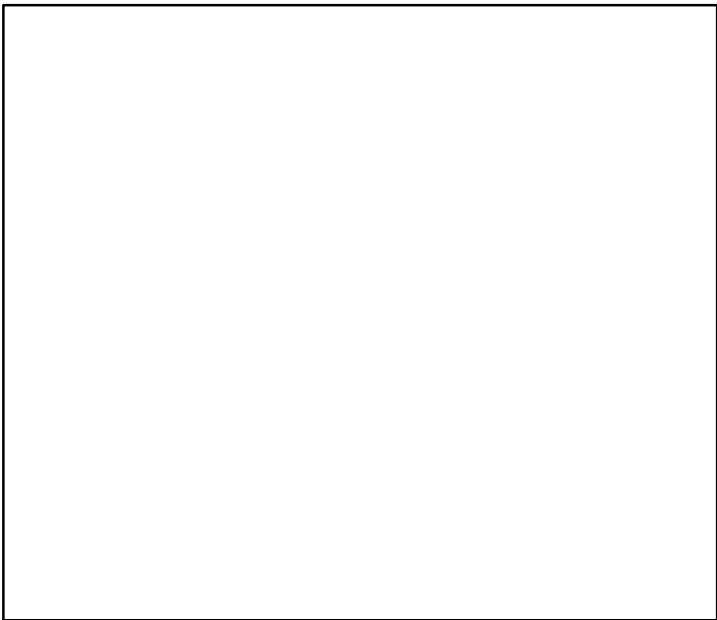
## Catfish Central West Africa Gabon [CATCWAGAB]

Metadata	
<b>Scientific Name</b>	Arius spp
<b>Current Assess ID</b>	FAO-DR-CATCWAGAB-1995-2007-CHING
<b>Area</b>	Central West Africa Gabon
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

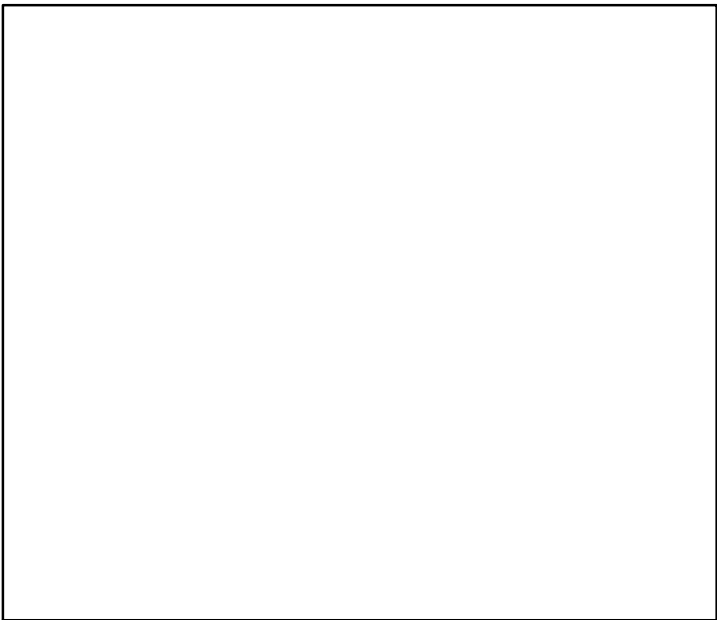
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	11	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	547		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

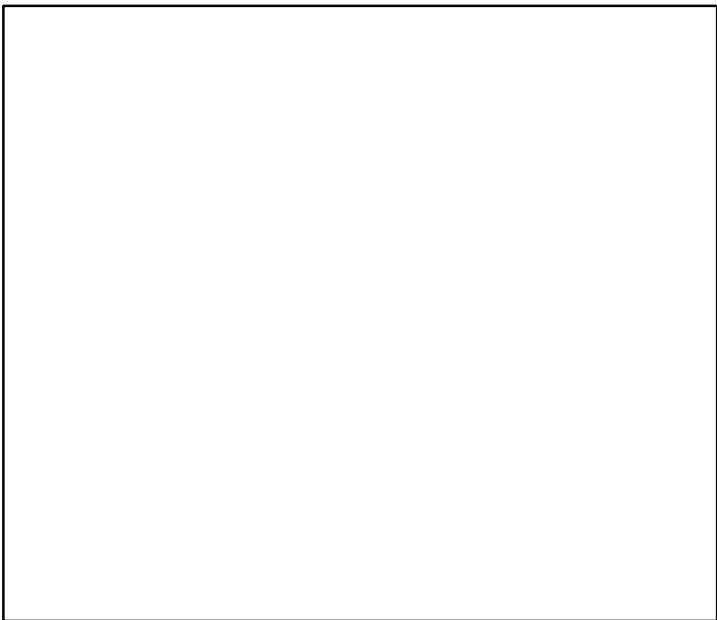
**Kobe MSY\***



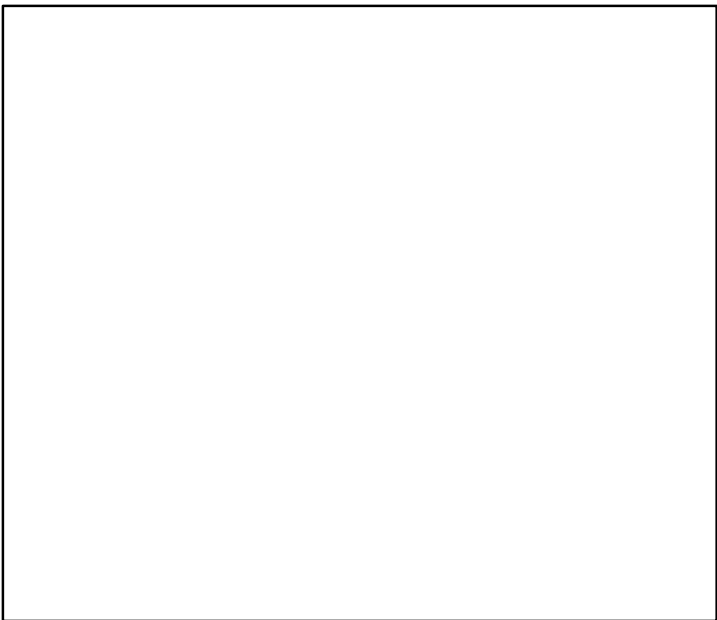
**Kobe MGT\***



**Spawner Recruit\***



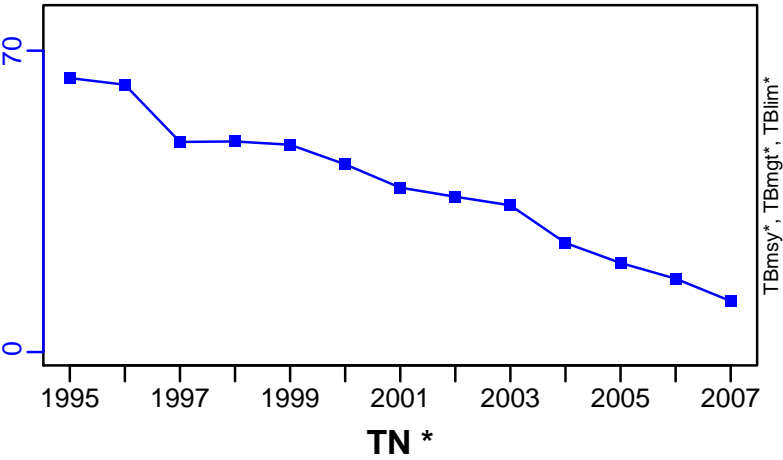
**Production\***



◆ Start Year   ◆ End Year   \* No Data

Catfish Central West Africa Gabon [CATCWAGAB]

TB-index (1995–2007–CHING)



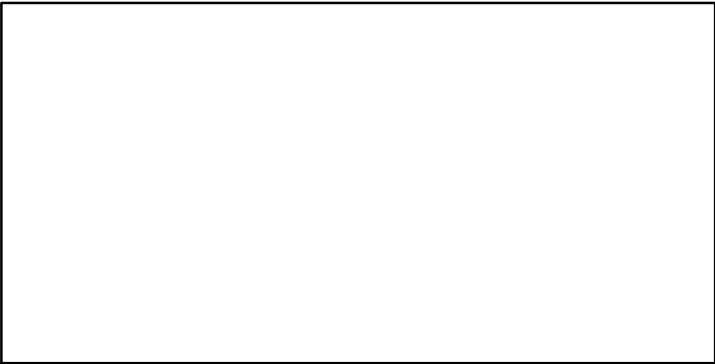
SSB\*



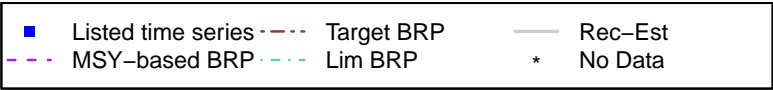
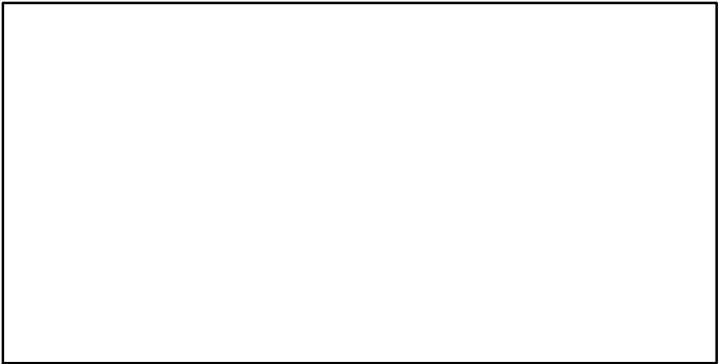
F\*



ER\*

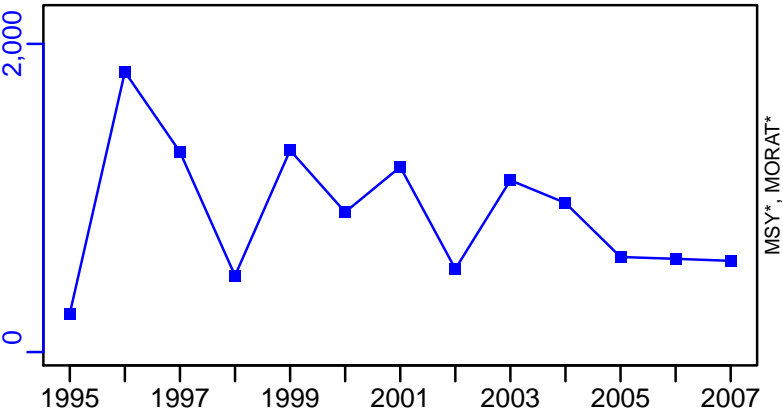


Recruits\*



Catfish Central West Africa Gabon [CATCWAGAB]

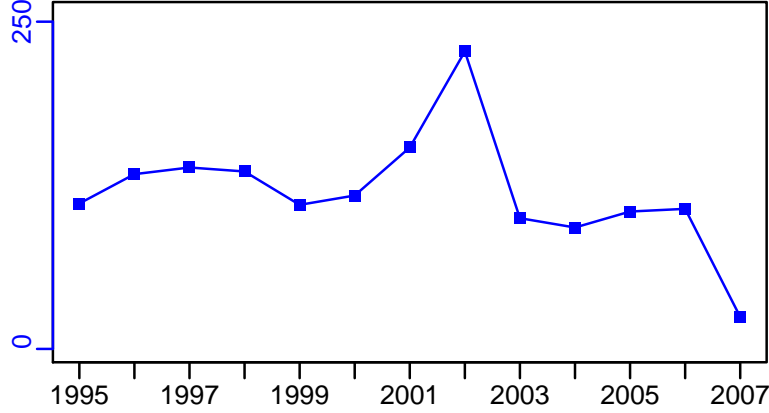
TC-MT, TL\*, RecC\* (1995-2007-CHING)



TAC\*, Cpair\*, Cadv\*



CPUE-kg/day (1995-2007-CHING)



EFFORT\*



## Catfish Central West Africa Guinea-Liberia [CATCWAGIN-LBR]

Metadata	
<b>Scientific Name</b>	Arius spp
<b>Current Assess ID</b>	FAO-DR-CATCWAGIN-LBR-1994-2008-CHING
<b>Area</b>	Central West Africa Guinea-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2008

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2008	2470		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

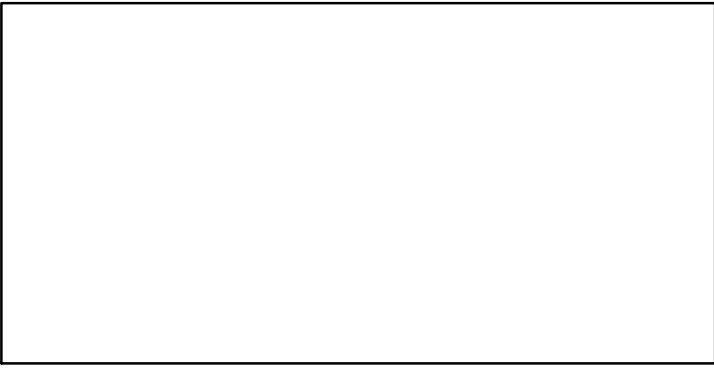


◆ Start Year ◆ End Year \* No Data



Catfish Central West Africa Guinea–Liberia [CATCWAGIN–LBR]

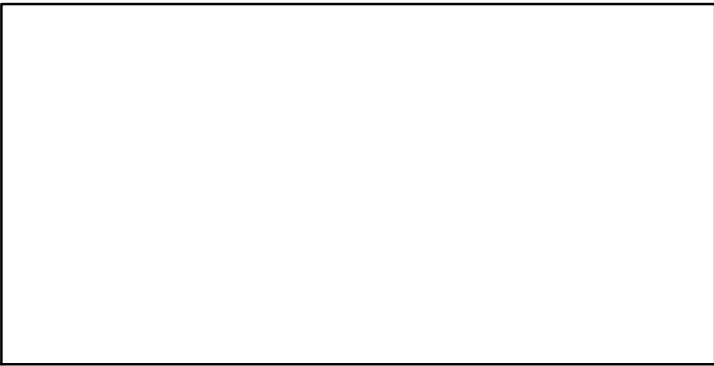
**TB\***



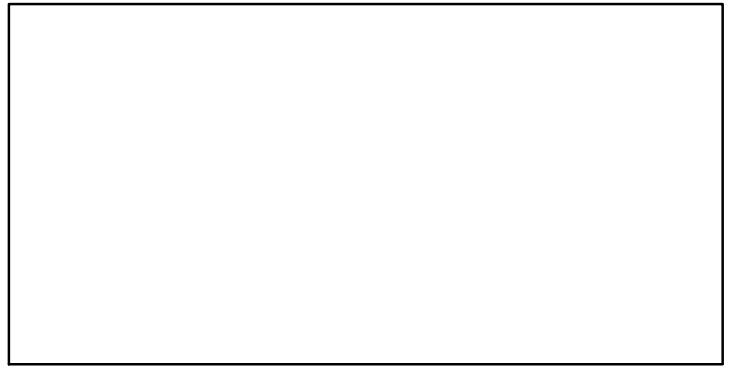
**SSB\***



**TN \***



**F\***



**ER\***

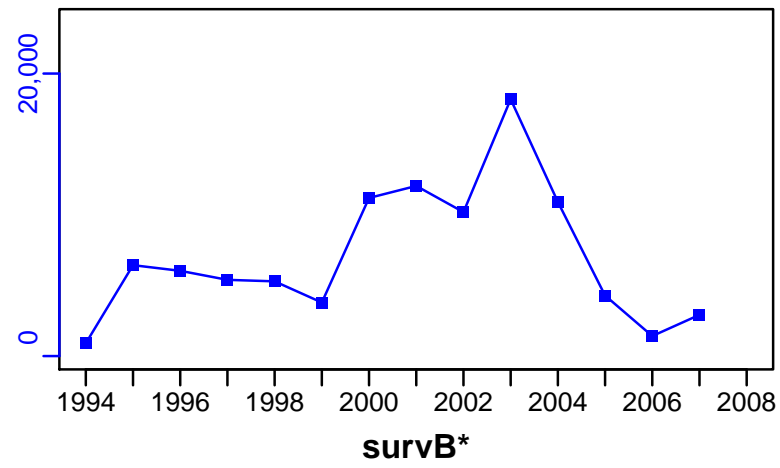


**Recruits\***



# Catfish Central West Africa Guinea-Liberia [CATCWAGIN-LBR]

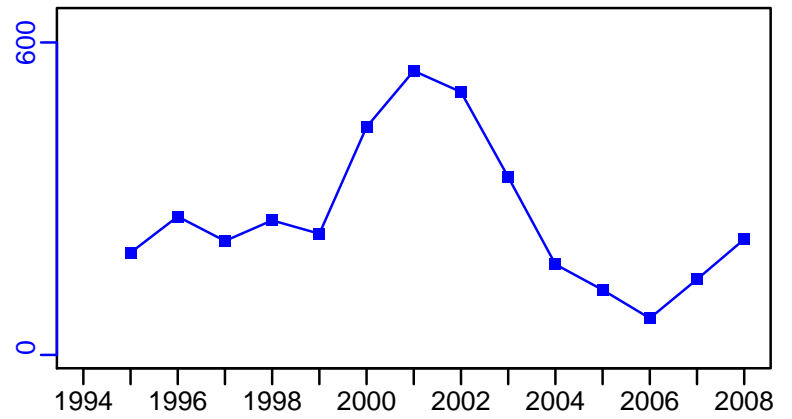
TC-MT, TL\*, RecC\* (1994-2008-CHING)



TAC\*, Cpair\*, Cadv\*



CPUE-MT/day (1994-2008-CHING)



EFFORT\*



CdivMSY\*



**Cunene horse mackerel Central West Africa Gabon-Angola**  
**[CHMACKCWAGAB-AGO]**

Metadata	
<b>Scientific Name</b>	Trachurus trecae
<b>Current Assess ID</b>	FAO-SPNWA-CHMACKCWAGAB-AGO-1990-2017-ASHBROOK
<b>Area</b>	Central West Africa Gabon-Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	48,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	1.21		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	0.78		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

TB\*



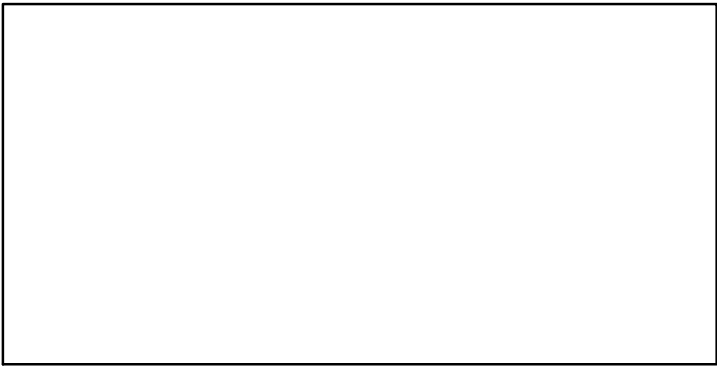
SSB\*



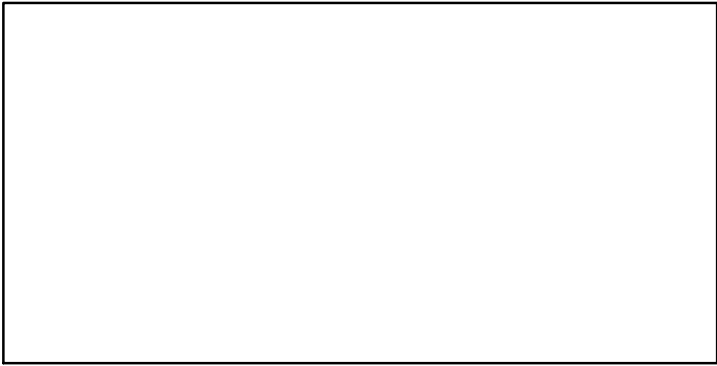
TN \*



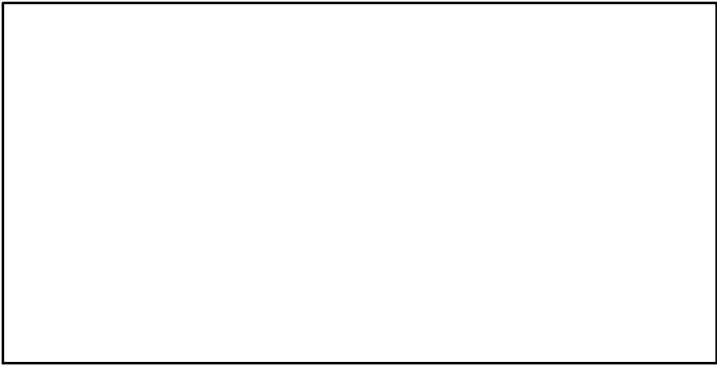
F\*



ER\*

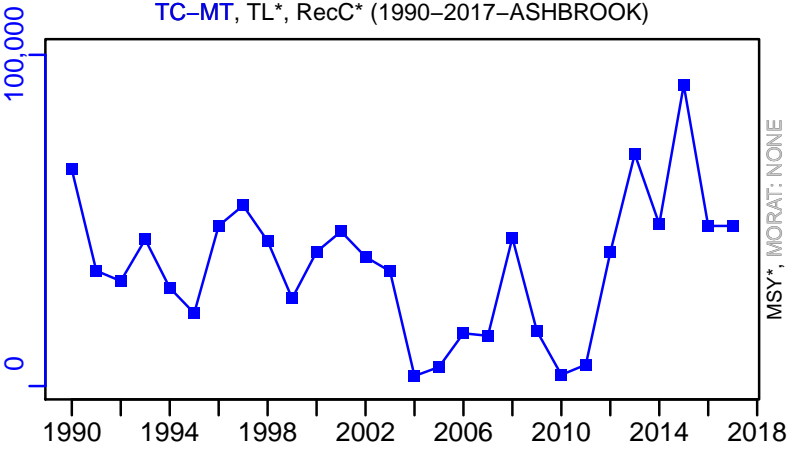


Recruits\*



# Cunene horse mackerel Central West Africa Gabon–Angola [CHMACKCWAGAB-AGO]

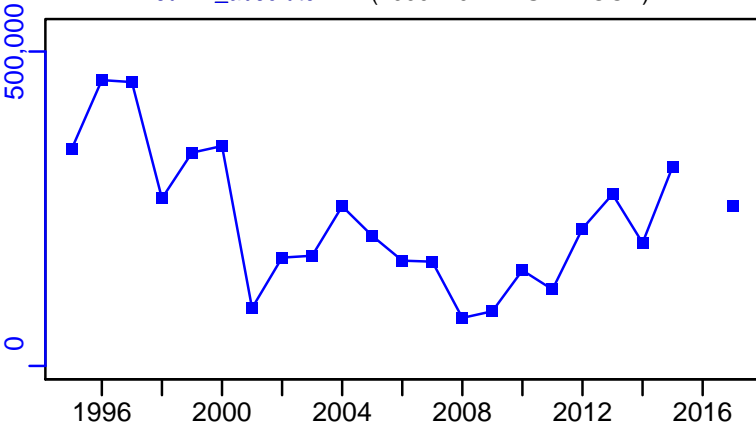
TC–MT, TL\*, RecC\* (1990–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_absolute–MT (1990–2017–ASHBROOK)



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

**Cunene horse mackerel Central West Africa Guinea Bissau-Liberia  
[CHMACKCWAGNB-LBR]**

Metadata	
<b>Scientific Name</b>	Trachurus trecae
<b>Current Assess ID</b>	FAO-SPNWA-CHMACKCWAGNB-LBR-1990-2017-ASHBROOK
<b>Area</b>	Central West Africa Guinea Bissau-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

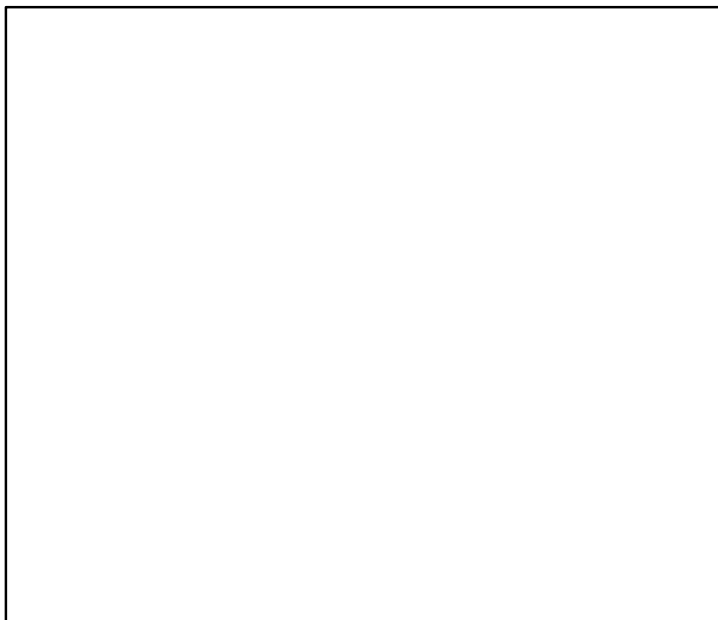
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	31,487		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	1.13		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	0.75		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

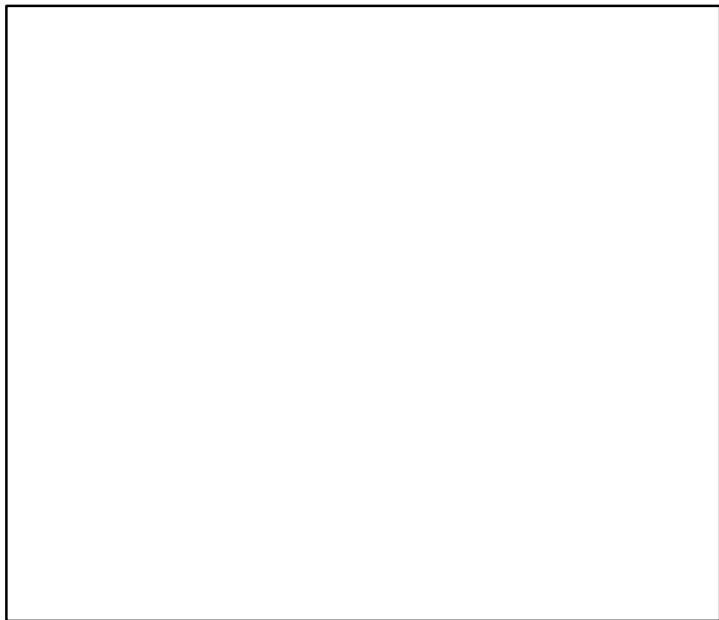
**Kobe MSY\***



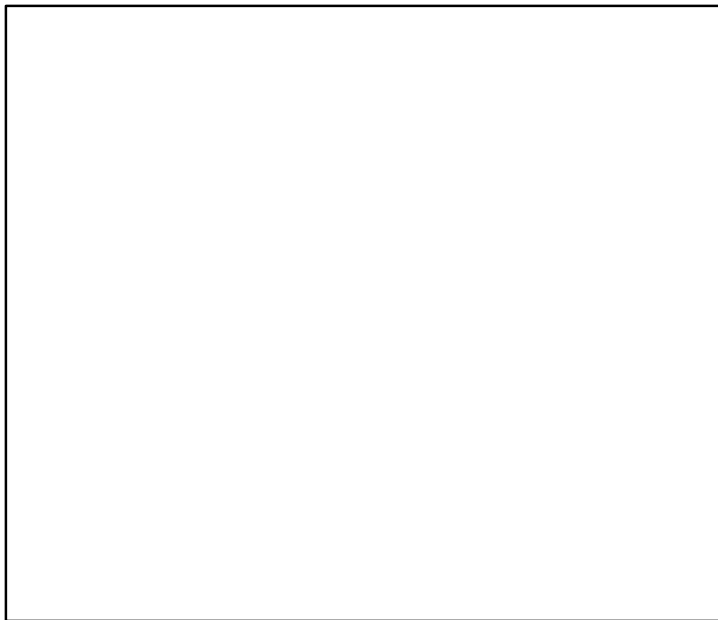
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data



**TB\***



**SSB\***



**TN \***



**F\***



**ER\***

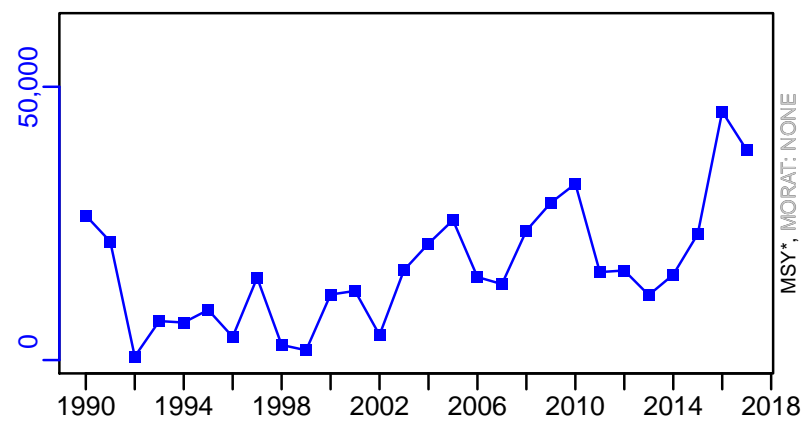


**Recruits\***



Cunene horse mackerel Central West Africa Guinea Bissau–Liberia [CHMACKCWAGNB–LBR]

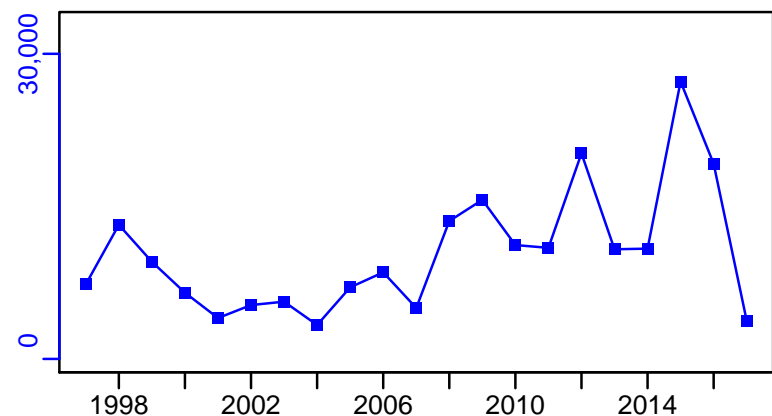
TC–MT, TL\*, RecC\* (1990–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_index–index (1990–2017–ASHBROOK)



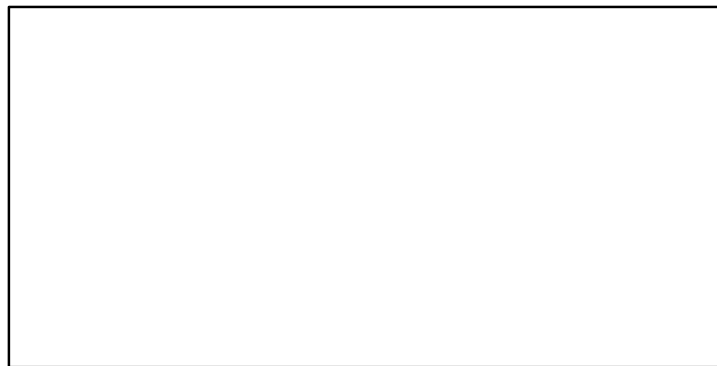
CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Cunene horse mackerel North West Africa [CHMACKNWA]

Metadata	
<b>Scientific Name</b>	Trachurus trecae
<b>Current Assess ID</b>	FAO-SPNWA-CHMACKNWA-1990-2016-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2010, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2010	0.53
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	253,000	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2010	1.39	-	-
<b>ER</b>	ER-calc-ratio	2010	1.391	-	-
<b>TC</b>	TC-MT	2016	235,883		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	2.623		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Cunene horse mackerel North West Africa [CHMACKNWA]

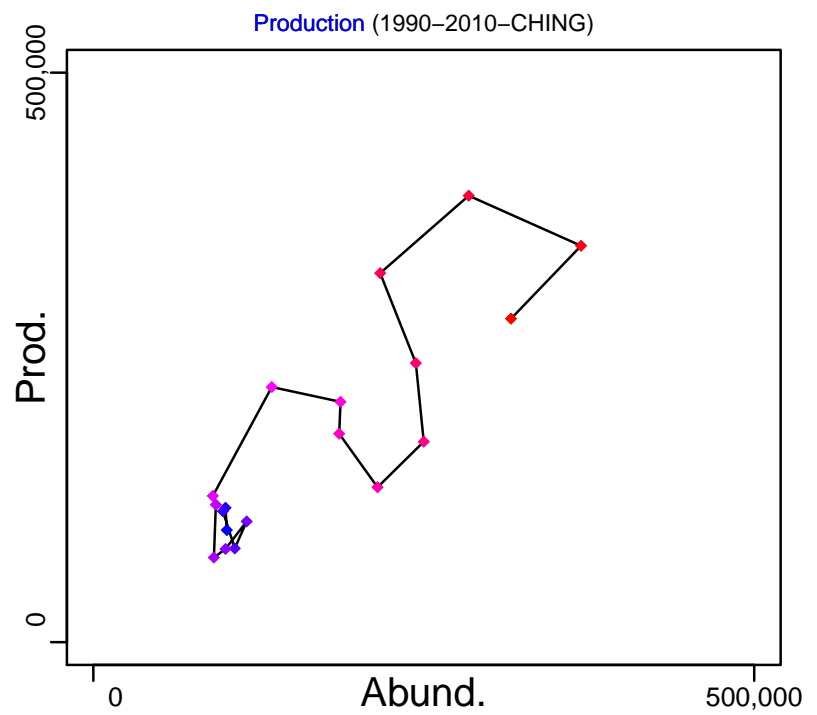
Kobe MSY\*



Kobe MGT\*



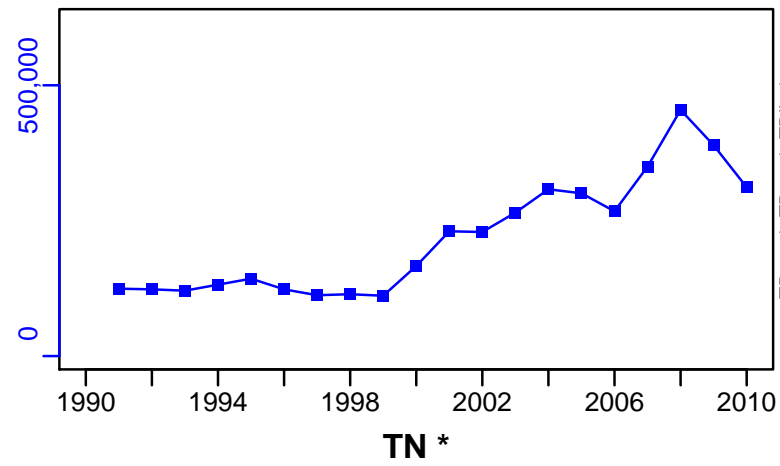
Spawner Recruit\*



◆ Start Year ◆ End Year \* No Data

# Cunene horse mackerel North West Africa [CHMACKNWA]

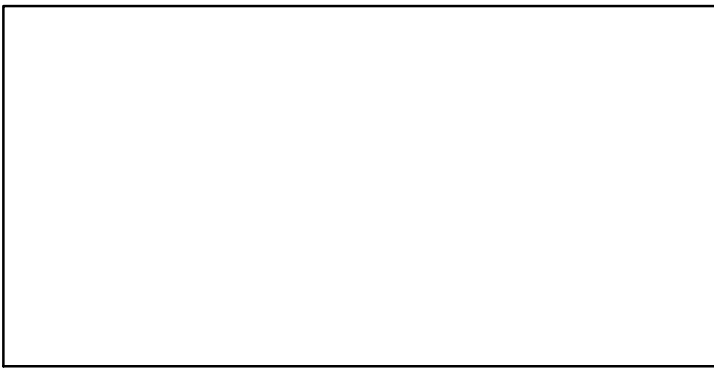
TB-MT (1990–2010–CHING)



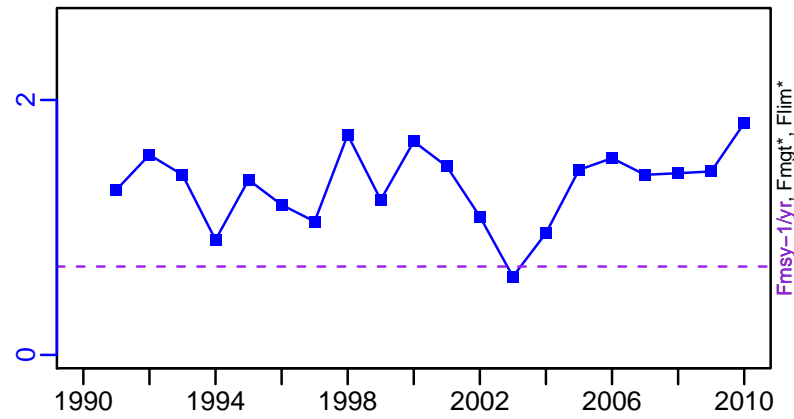
SSB\*



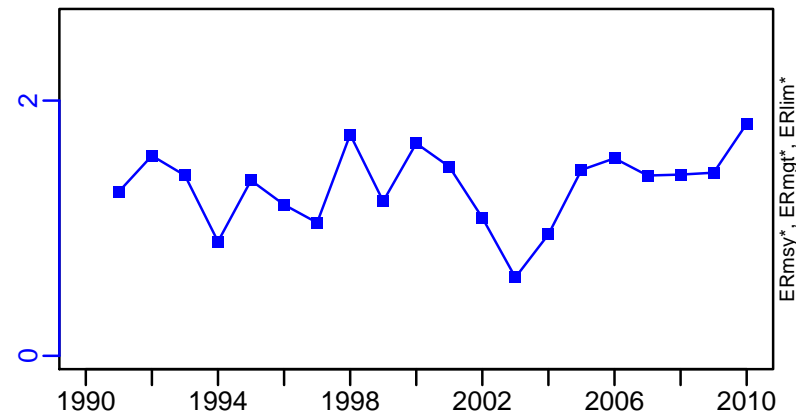
TN \*



F-1/yr (1990–2010–CHING)



ER-calc-ratio (1990–2010–CHING)



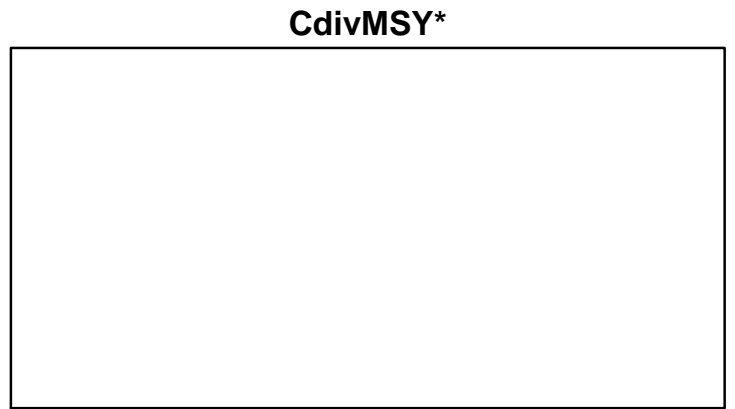
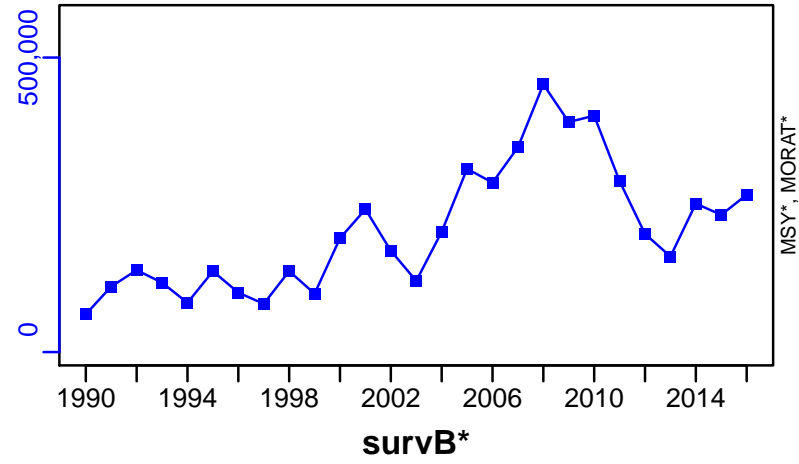
Recruits\*



# Cunene horse mackerel North West Africa [CHMACKNWA]

TC-MT, TL\*, RecC\* (1990–2016–ASHBROOK)

TAC\*, Cpair\*, Cadv\*



## Chub mackerel North West Africa [CMACKNWA]

Metadata	
<b>Scientific Name</b>	Scomber japonicus
<b>Current Assess ID</b>	FAO-SPNWA-CMACKNWA-1990-2013-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2010, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2010	0.67
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2013	255,485
<b>M</b>	M-1/yr	2013	0.58
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	262,000	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2010	0.79	-	-
<b>ER</b>	ER-calc-ratio	2010	0.786	-	-
<b>TC</b>	TC-MT	2013	332,542		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	1.179		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



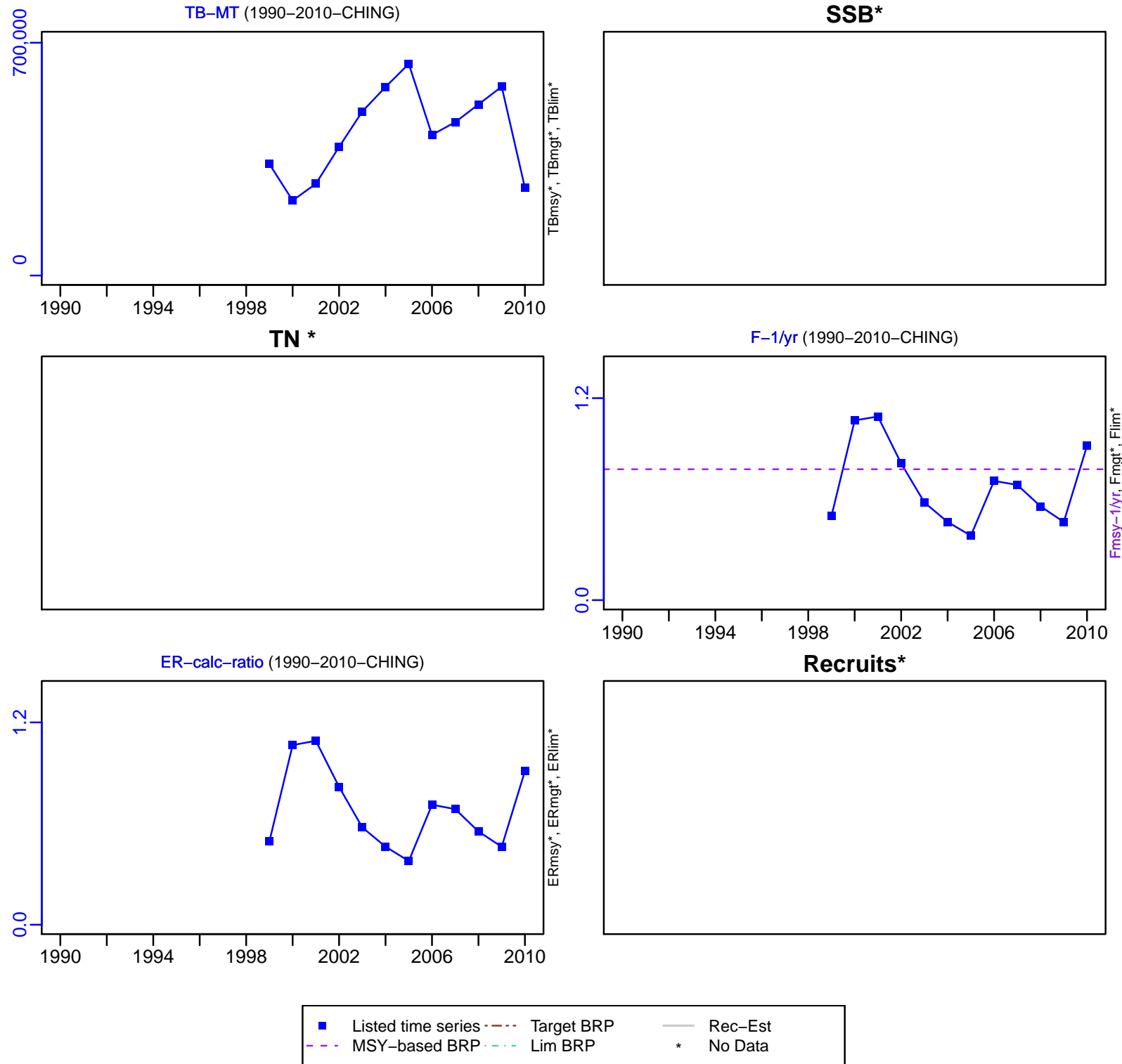
Production\*



◆ Start Year   ◆ End Year   \* No Data

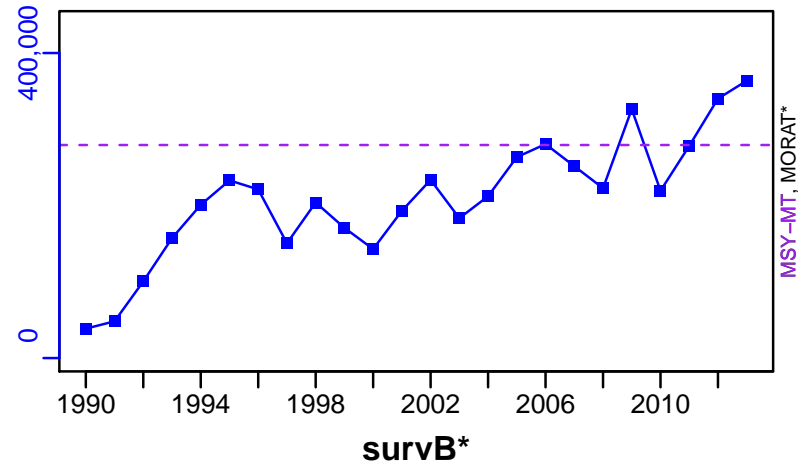


# Chub mackerel North West Africa [CMACKNWA]



# Chub mackerel North West Africa [CMACKNWA]

TC-MT, TL\*, RecC\* (1990–2013–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



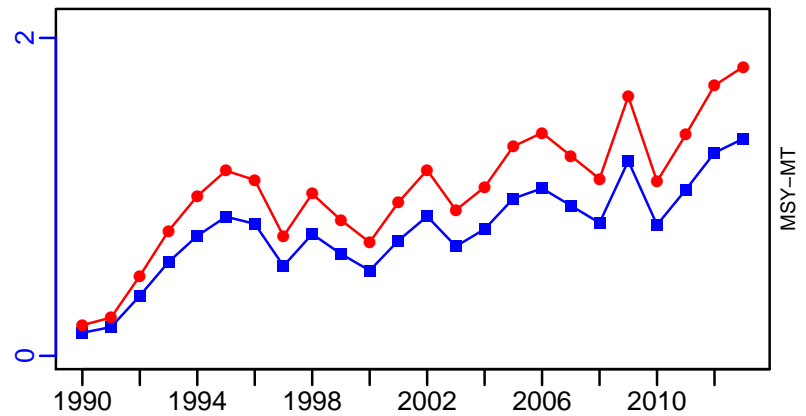
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1990–2013–ASHBROOK)



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
 ● 2nd listed time series    - - - MSY    \* No Data

## Croaker Central West Africa Cote Divoire-Benin [CROAKSPPCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Pseudotolithus spp
<b>Current Assess ID</b>	FAO-DR-CROAKSPPCWACIV-BEN-1990-2006-CHING
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2006

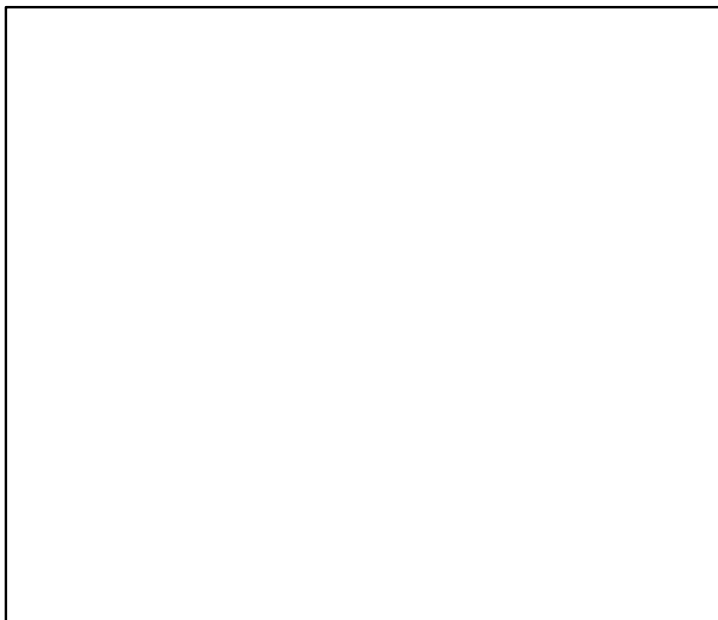
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2006	2790		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

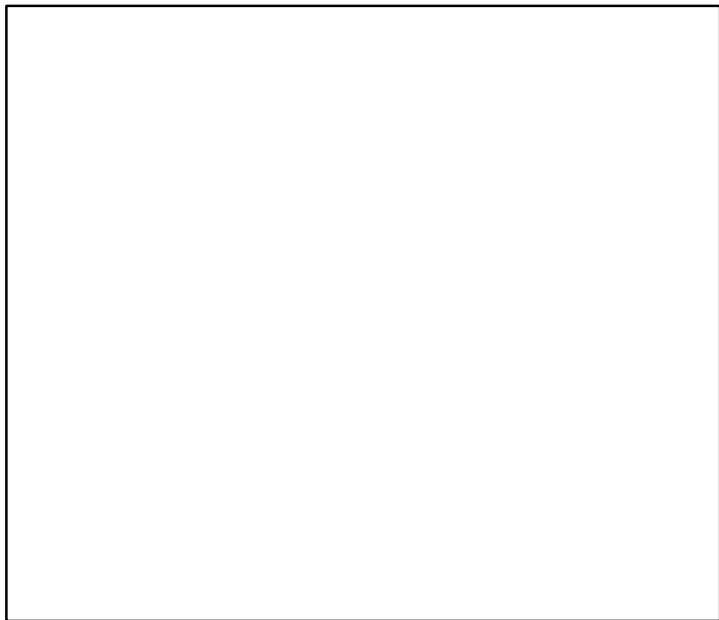
**Kobe MSY\***



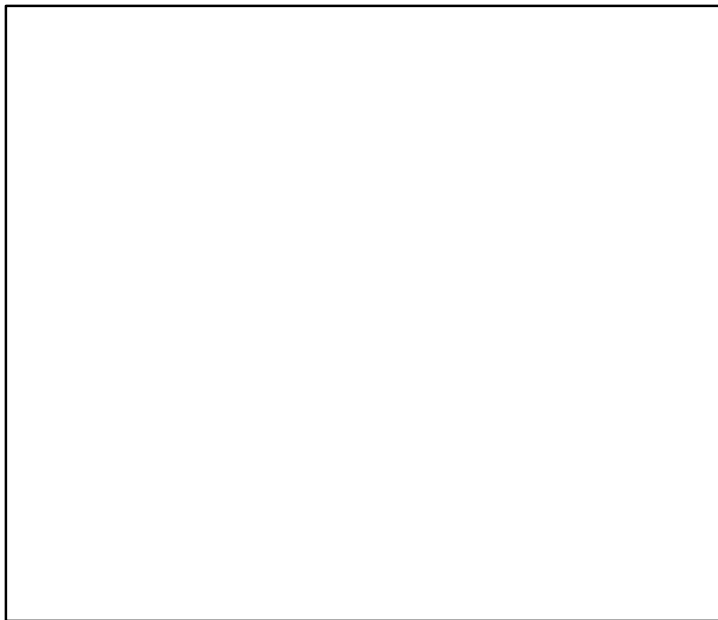
**Kobe MGT\***



**Spawner Recruit\***

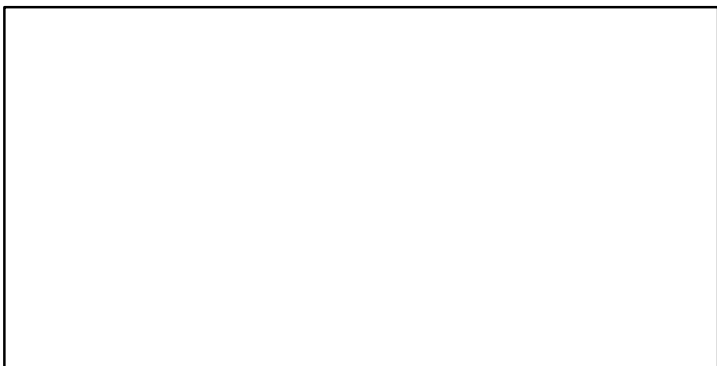


**Production\***

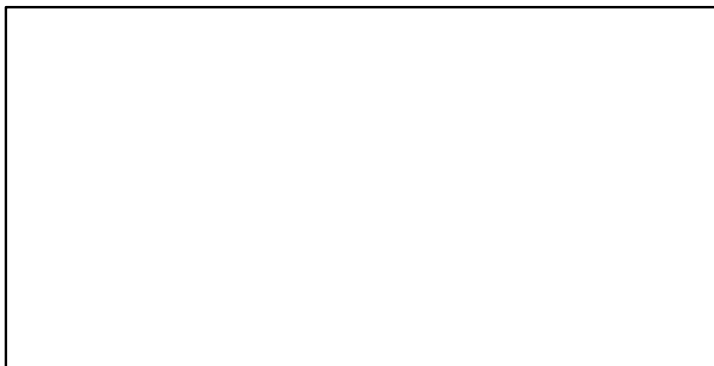


◆ Start Year ◆ End Year \* No Data

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***

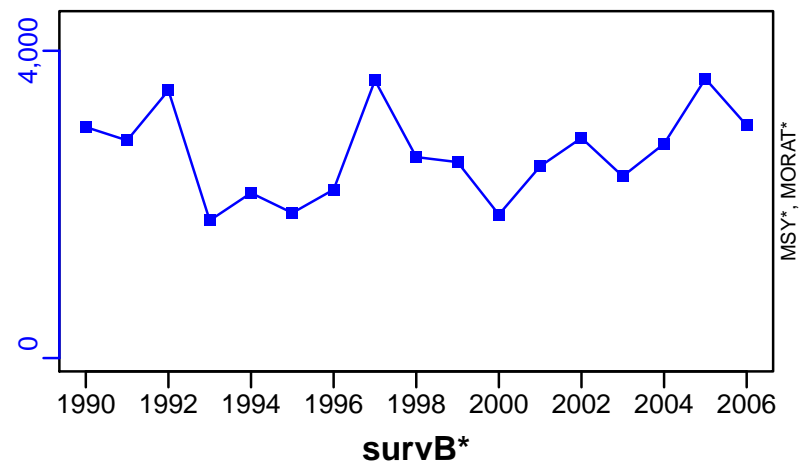


**Recruits\***



# Croaker Central West Africa Cote Divoire–Benin [CROAKSPPCWACIV–BEN]

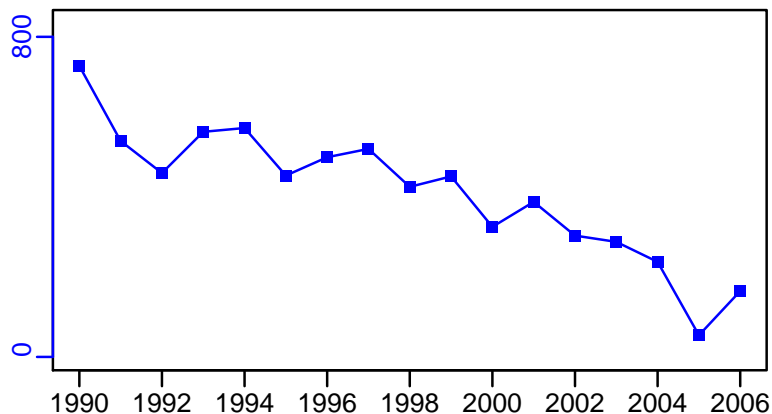
TC–MT, TL\*, RecC\* (1990–2006–CHING)



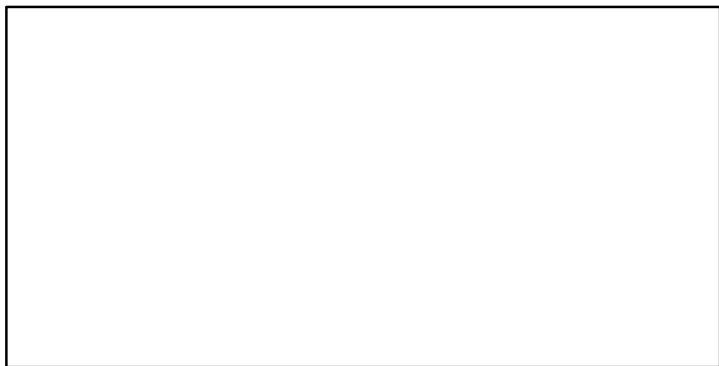
TAC\*, Cpair\*, Cadv\*



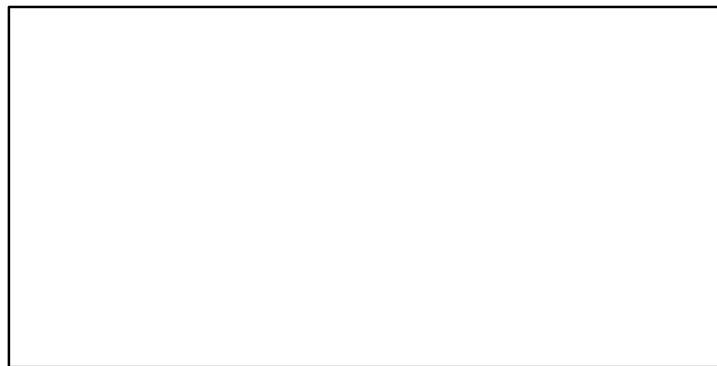
CPUE–kg/day (1990–2006–CHING)



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Croaker Central West Africa Gabon-Angola [CROAKSPPCWAGAB-AGO]

Metadata	
<b>Scientific Name</b>	Pseudotolithus spp
<b>Current Assess ID</b>	FAO-DR-CROAKSPPCWAGAB-AGO-1990-2007-CHING
<b>Area</b>	Central West Africa Gabon-Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	351	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	38,700		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



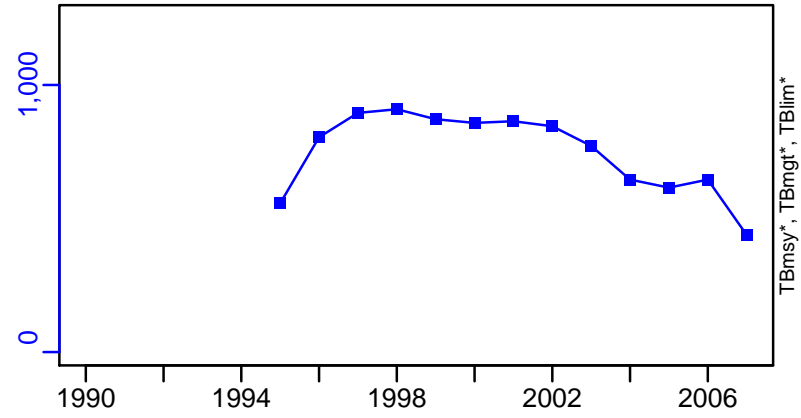
◆ Start Year ◆ End Year \* No Data



Croaker Central West Africa Gabon–Angola [CROAKSPPCWAGAB–AGO]

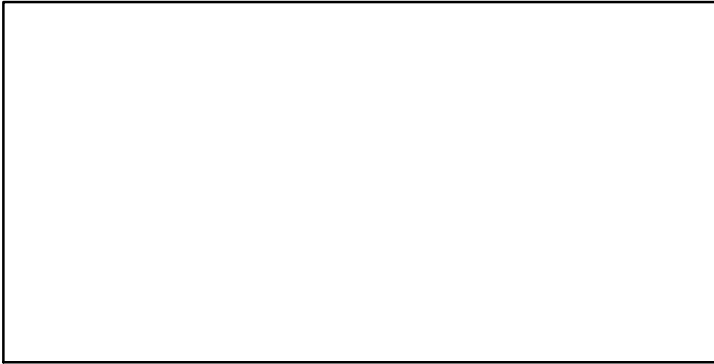
TB-index (1990–2007–CHING)

SSB\*



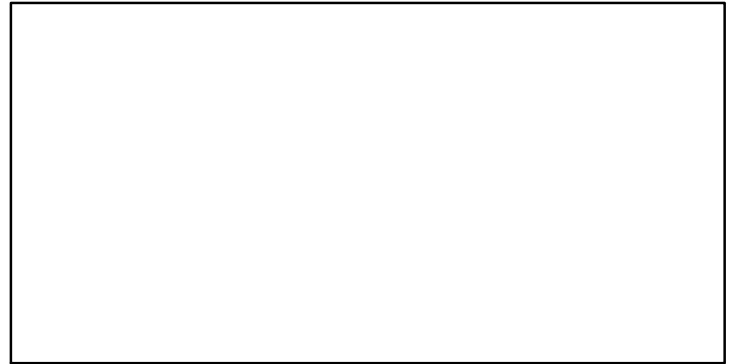
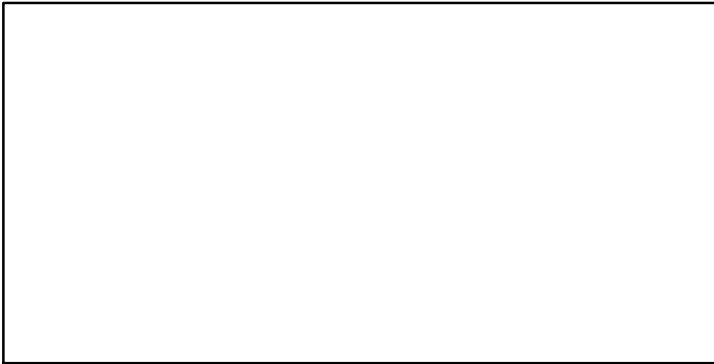
TN \*

F\*



ER\*

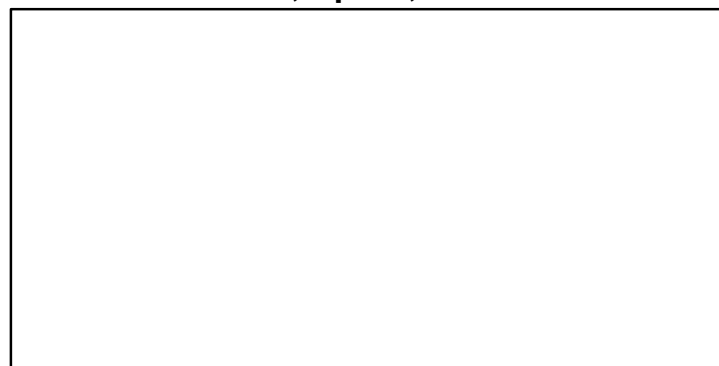
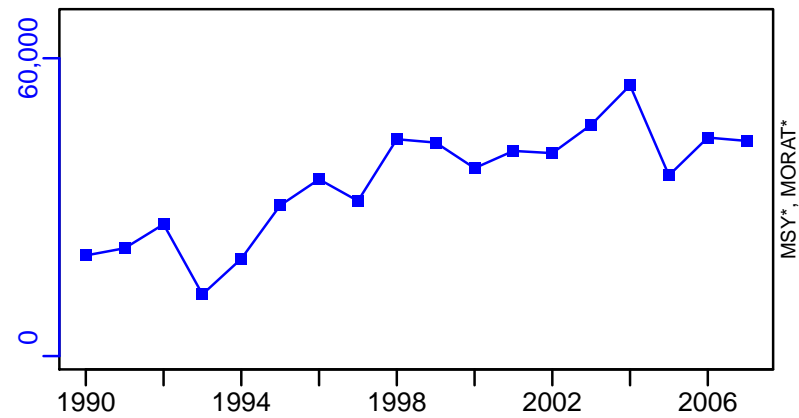
Recruits\*



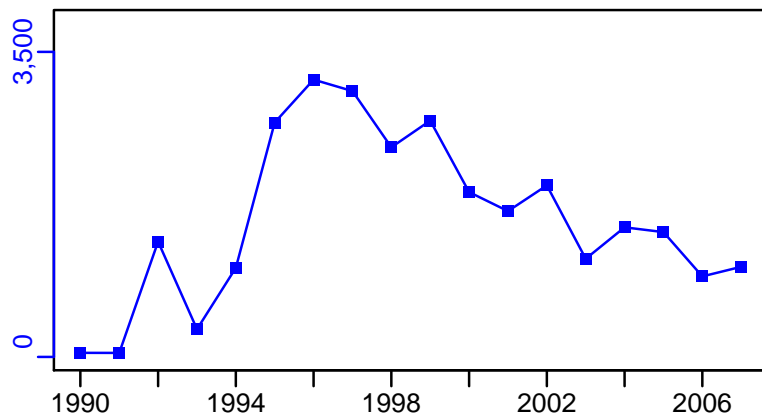
# Croaker Central West Africa Gabon–Angola [CROAKSPPCWAGAB–AGO]

TC–MT, TL\*, RecC\* (1990–2007–CHING)

TAC\*, Cpair\*, Cadv\*

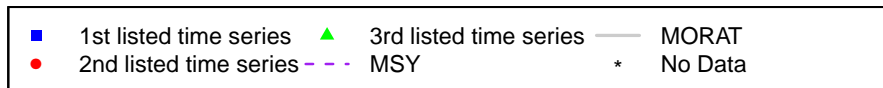
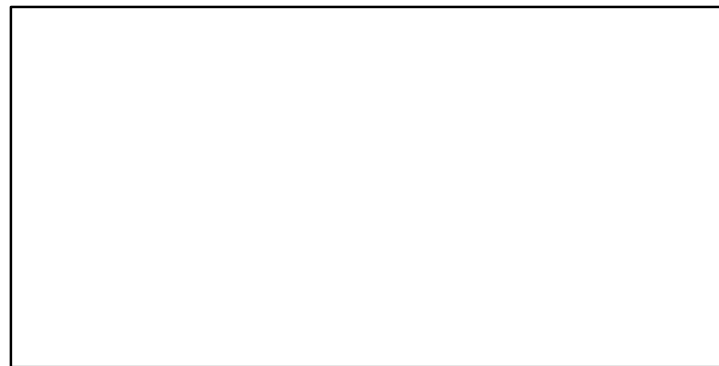
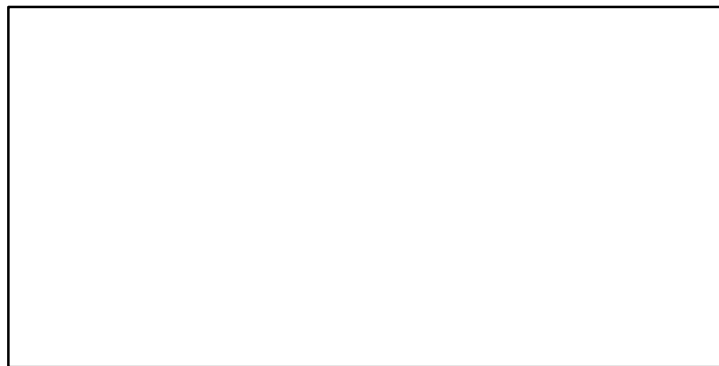


CPUE–kg/day (1990–2007–CHING)



EFFORT\*

CdivMSY\*



## Croaker Central West Africa Guinea-Liberia [CROAKSPPCWAGIN-LBR]

Metadata	
<b>Scientific Name</b>	Pseudotolithus spp
<b>Current Assess ID</b>	FAO-DR-CROAKSPPCWAGIN-LBR-1994-2007-CHING
<b>Area</b>	Central West Africa Guinea-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	40	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	4730		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

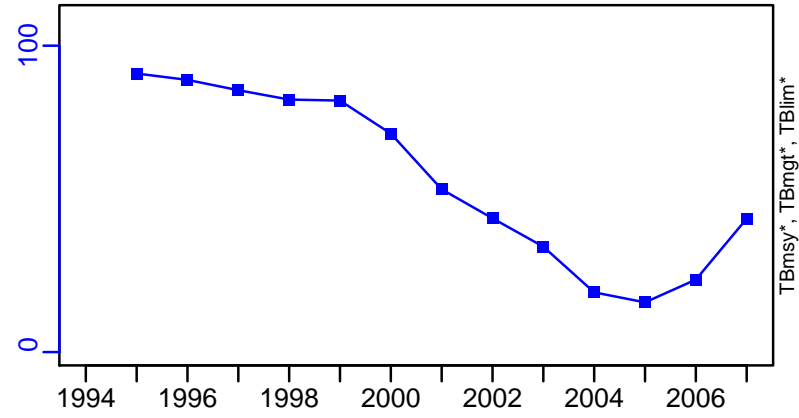


◆ Start Year ◆ End Year \* No Data

# Croaker Central West Africa Guinea–Liberia [CROAKSPPCWAGIN–LBR]

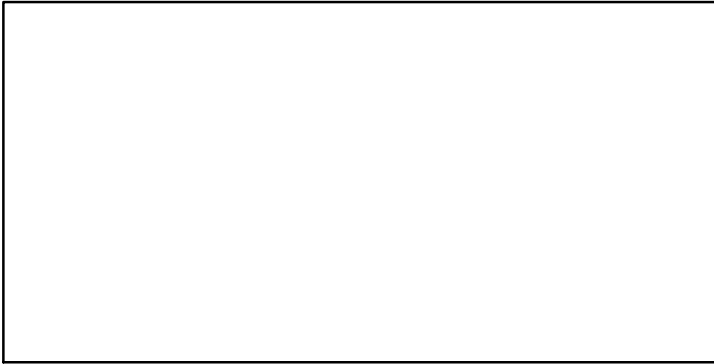
TB–index (1994–2007–CHING)

SSB\*



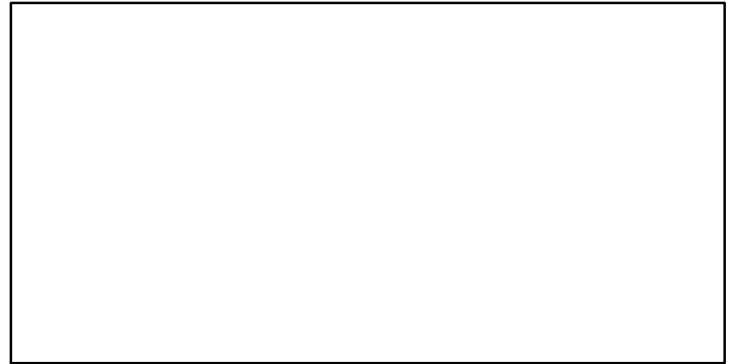
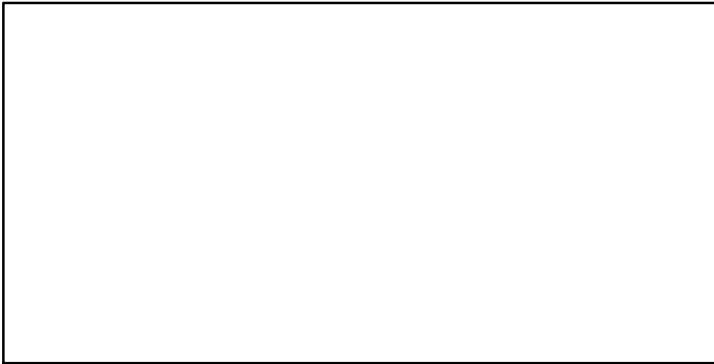
TN \*

F\*



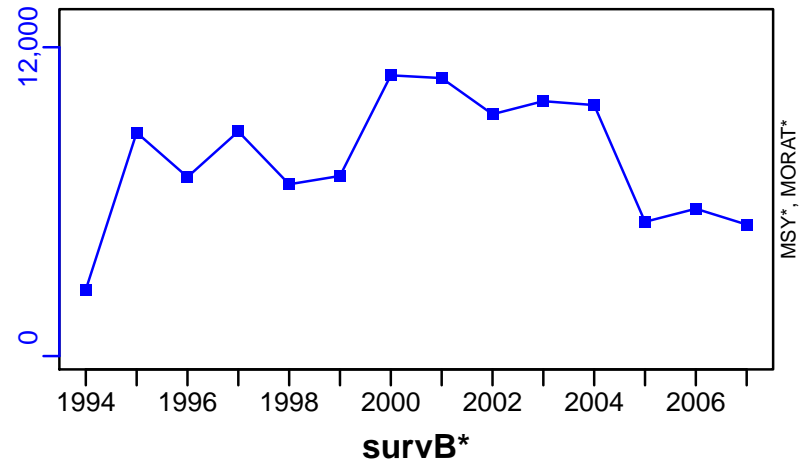
ER\*

Recruits\*



# Croaker Central West Africa Guinea–Liberia [CROAKSPPCWAGIN–LBR]

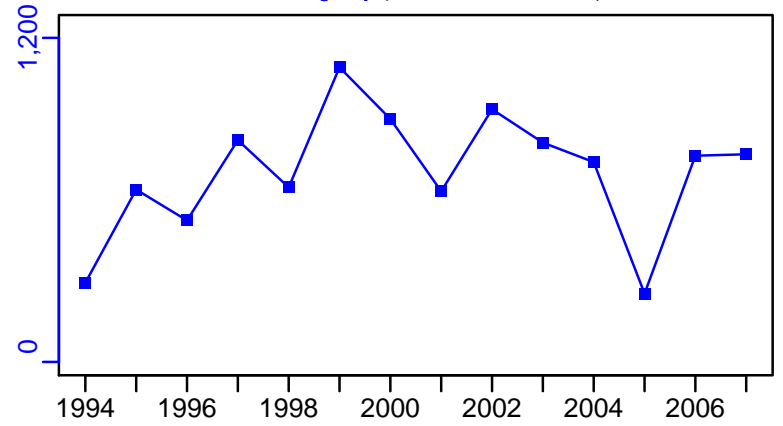
TC–MT, TL\*, RecC\* (1994–2007–CHING)



TAC\*, Cpair\*, Cadv\*



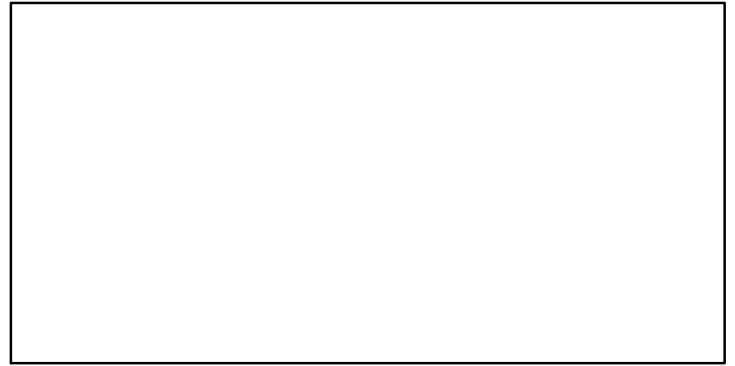
CPUE–kg/day (1994–2007–CHING)



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Coastal shrimp Central West Africa [CSHRIMPCWA]

Metadata	
<b>Scientific Name</b>	Penaeus spp
<b>Current Assess ID</b>	FAO-DR-CSHRIMPCWA-1990-2007-CHING
<b>Area</b>	Central West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	6580		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

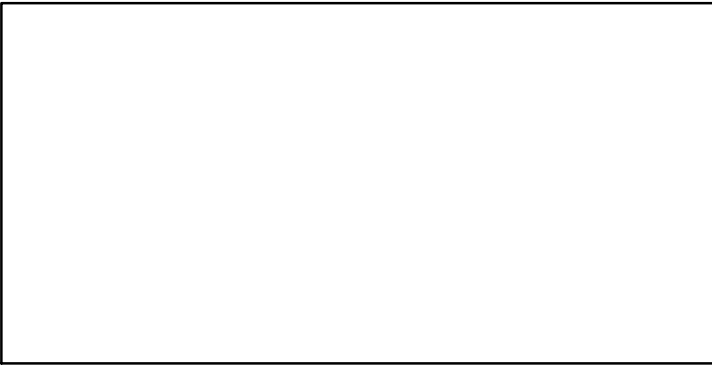


◆ Start Year ◆ End Year \* No Data



Coastal shrimp Central West Africa [CSHRIMPCWA]

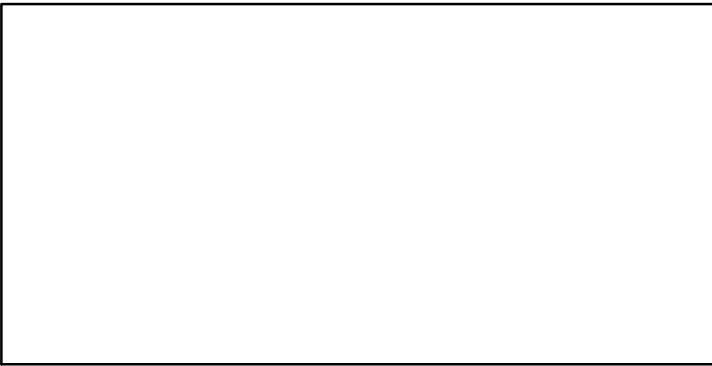
**TB\***



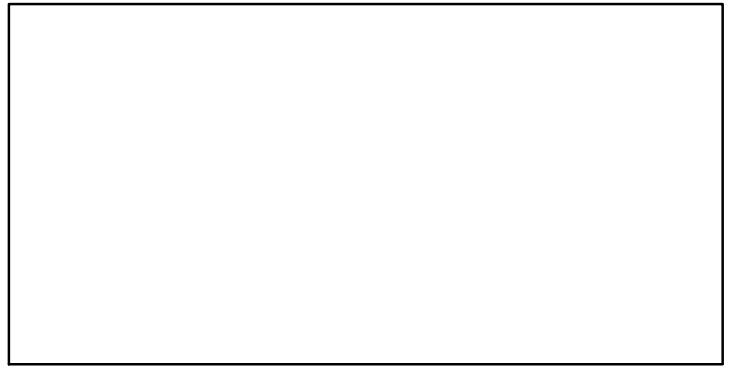
**SSB\***



**TN \***



**F\***



**ER\***



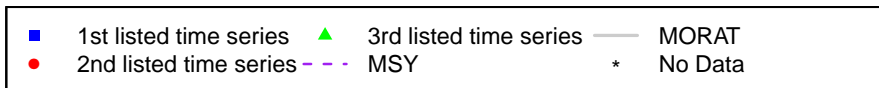
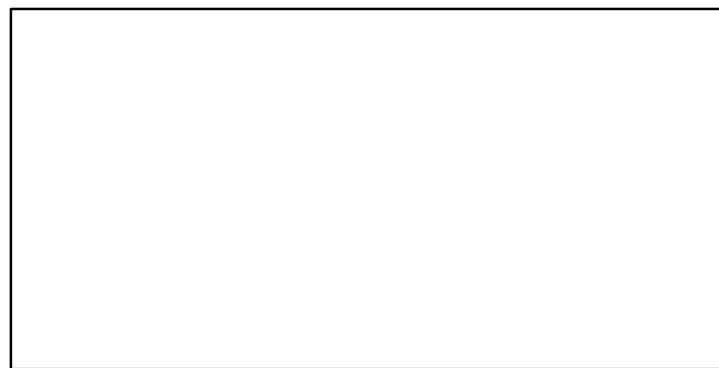
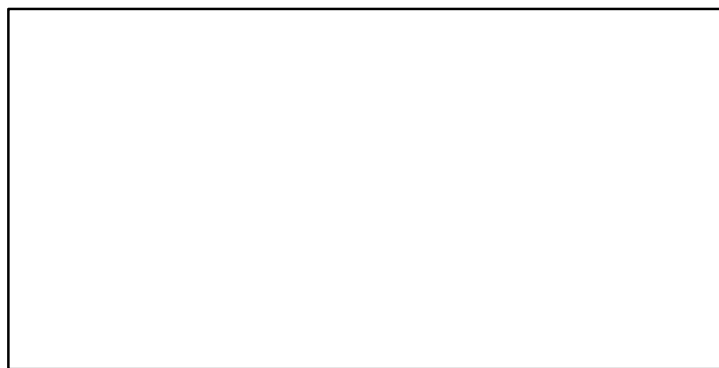
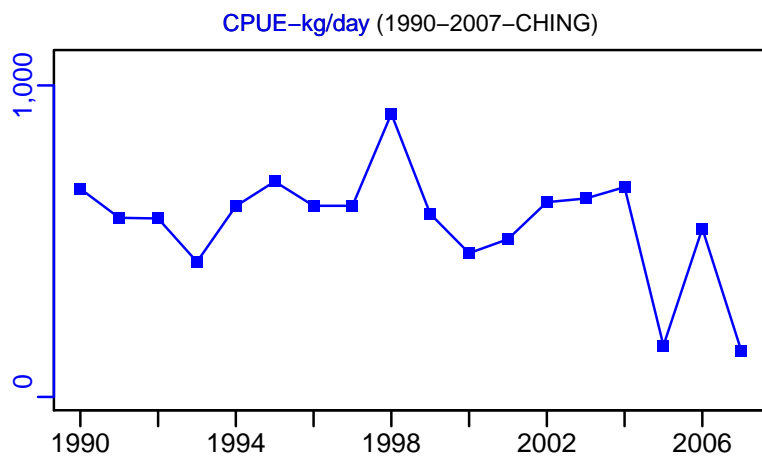
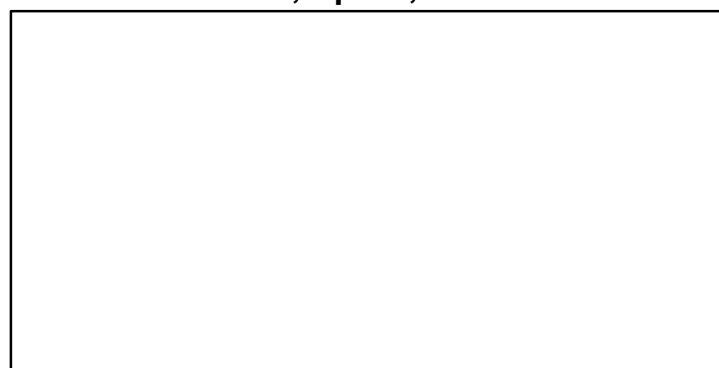
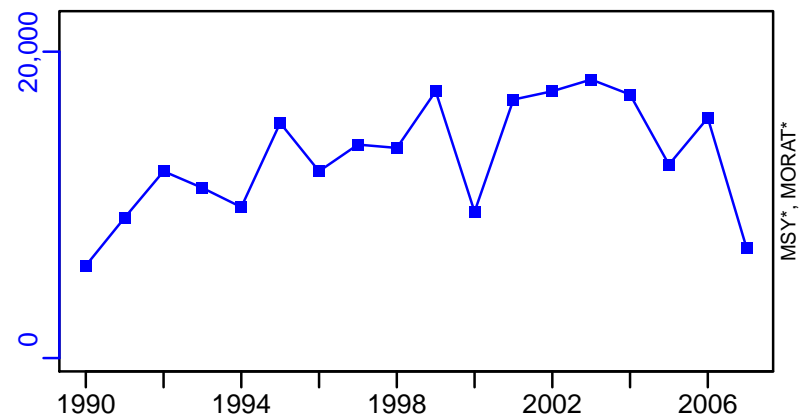
**Recruits\***



# Coastal shrimp Central West Africa [CSHRIMPCWA]

TC-MT, TL\*, RecC\* (1990-2007-CHING)

TAC\*, Cpair\*, Cadv\*



## Cuttlefish Central West Africa Ghana [CUTTLECWAGHA]

Metadata	
<b>Scientific Name</b>	Sepia spp
<b>Current Assess ID</b>	FAO-DR-CUTTLECWAGHA-1990-2007-CHING
<b>Area</b>	Central West Africa Ghana
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	242	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	3780		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



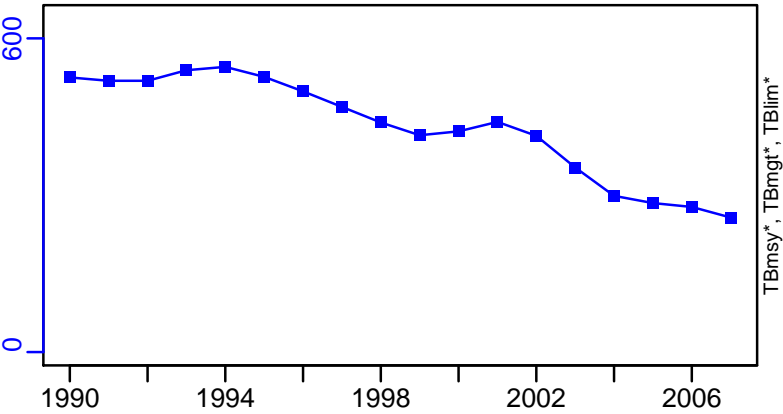
Production\*



◆ Start Year    ◆ End Year    \* No Data

Cuttlefish Central West Africa Ghana [CUTTLECWAGHA]

TB-index (1990–2007–CHING)



SSB\*



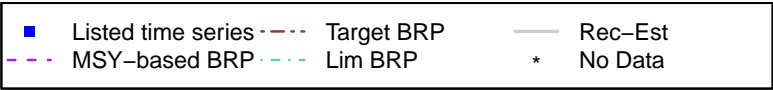
F\*



ER\*



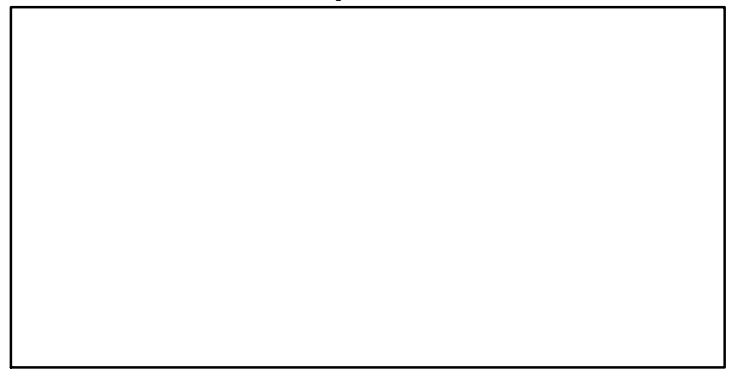
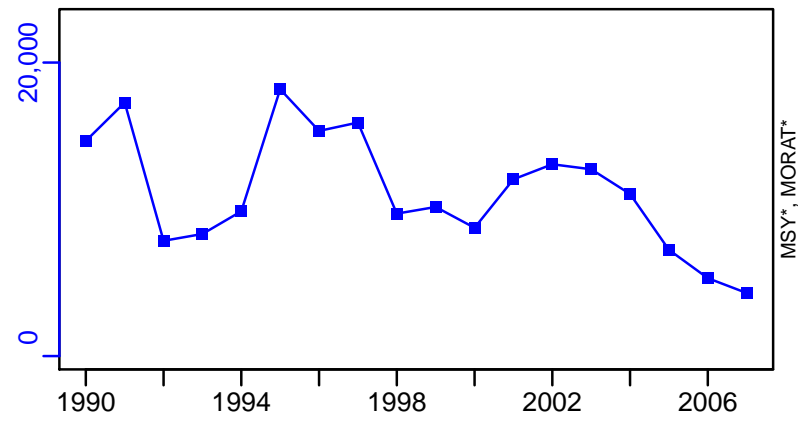
Recruits\*



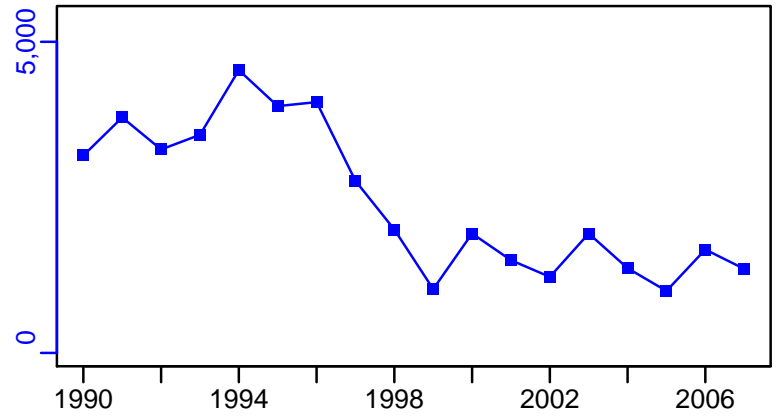
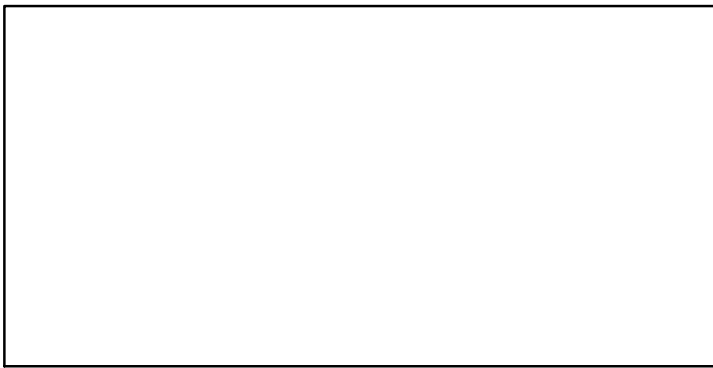
# Cuttlefish Central West Africa Ghana [CUTTLECWAGHA]

TC-MT, TL\*, RecC\* (1990-2007-CHING)

TAC\*, Cpair\*, Cadv\*

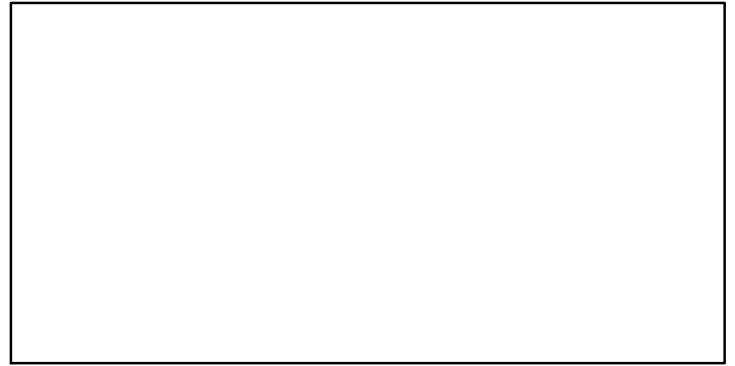
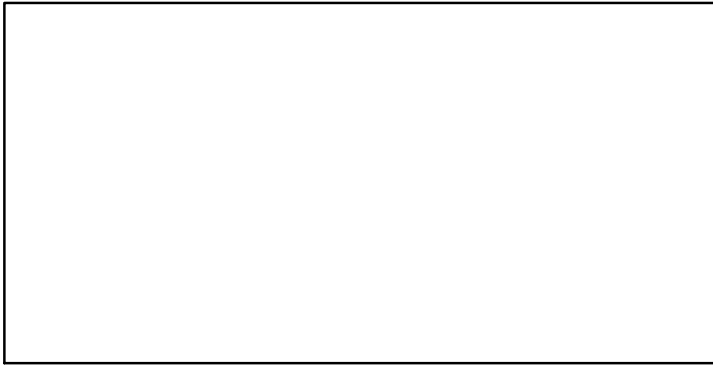


CPUE-kg/day (1990-2007-CHING)



EFFORT\*

CdivMSY\*



## Deep water rose shrimp Central West Africa [DRSHRIMPCWA]

Metadata	
<b>Scientific Name</b>	Parapenaeus longirostris
<b>Current Assess ID</b>	FAO-DR-DRSHRIMPCWA-1990-2007-CHING
<b>Area</b>	Central West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	1320		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data



Deep water rose shrimp Central West Africa [DRSHRIMPCWA]

TB\*



SSB\*



TN \*



F\*



ER\*



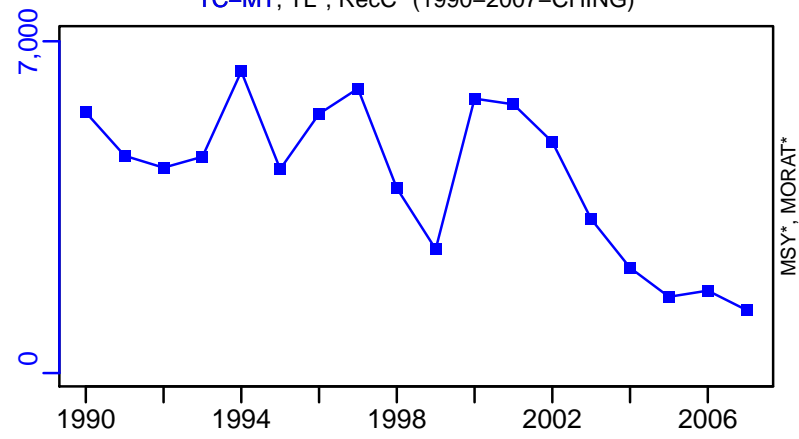
Recruits\*



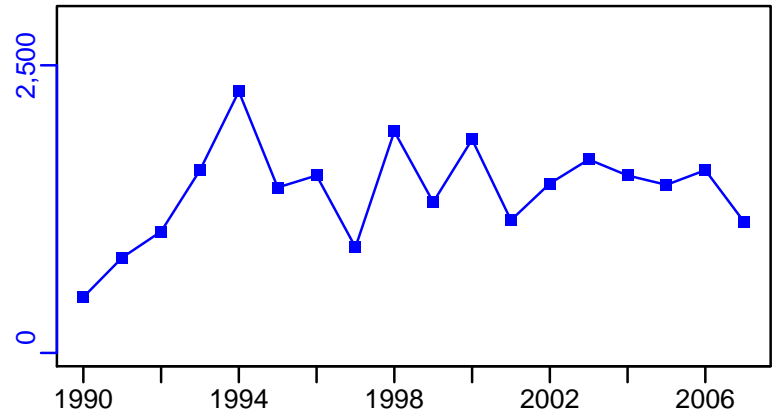
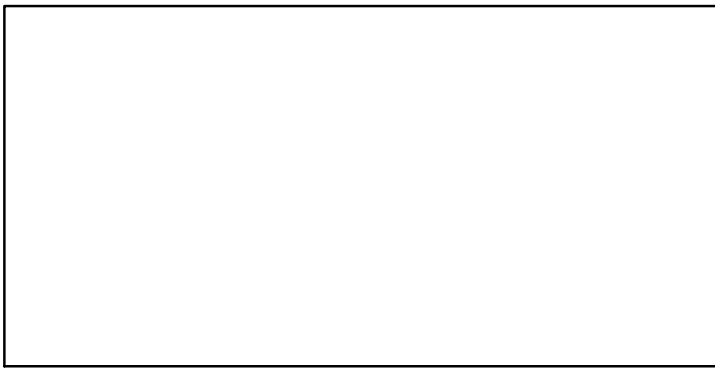
# Deep water rose shrimp Central West Africa [DRSHRIMPCWA]

TC-MT, TL\*, RecC\* (1990-2007-CHING)

TAC\*, Cpair\*, Cadv\*

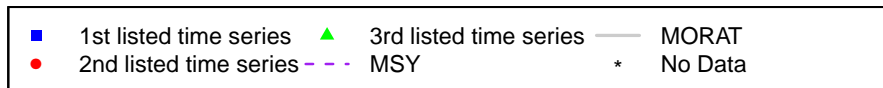
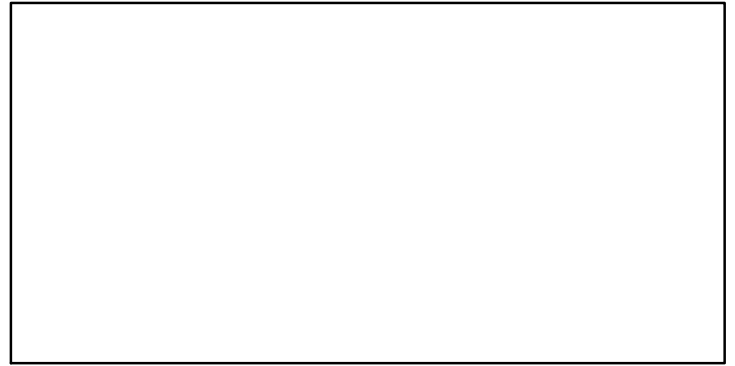
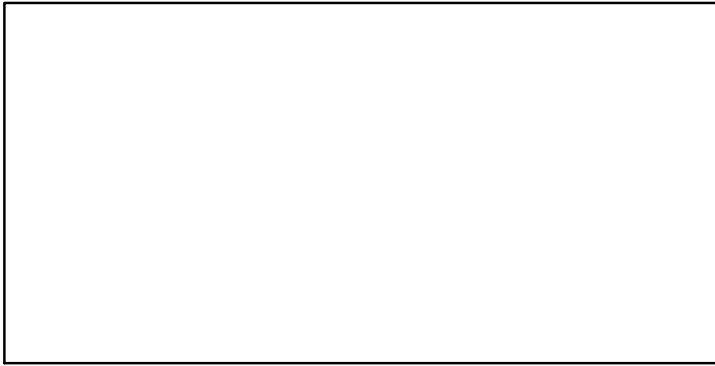


CPUE-kg/day (1990-2007-CHING)



EFFORT\*

CdivMSY\*



## Grey grunt Central West Africa Gabon-Angola [GGRUNTCWAGAB-AGO]

Metadata	
<b>Scientific Name</b>	Pomadasys spp
<b>Current Assess ID</b>	FAO-DR-GGRUNTCWAGAB-AGO-1995-2007-CHING
<b>Area</b>	Central West Africa Gabon-Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

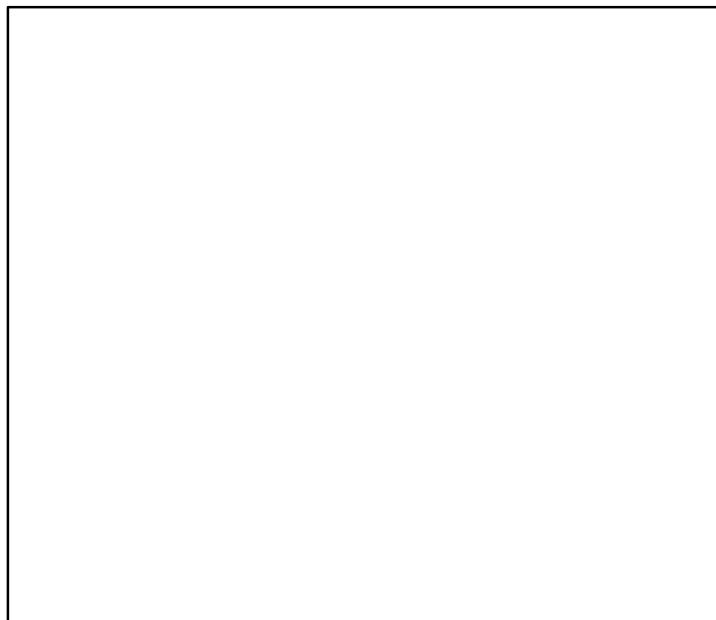
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	19	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	912		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

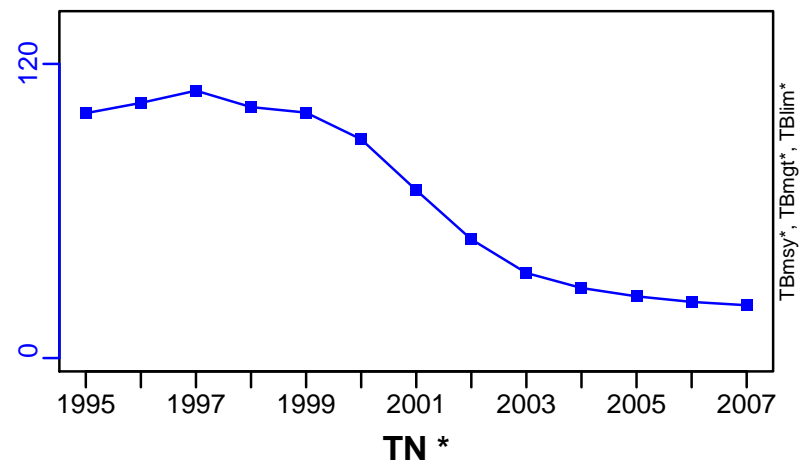


◆ Start Year ◆ End Year \* No Data

# Grey grunt Central West Africa Gabon–Angola [GGRUNTCWAGAB–AGO]

TB-index (1995–2007–CHING)

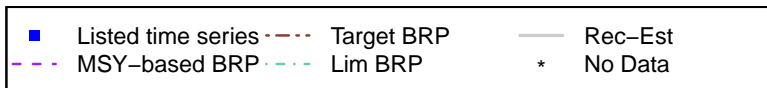
SSB\*



F\*

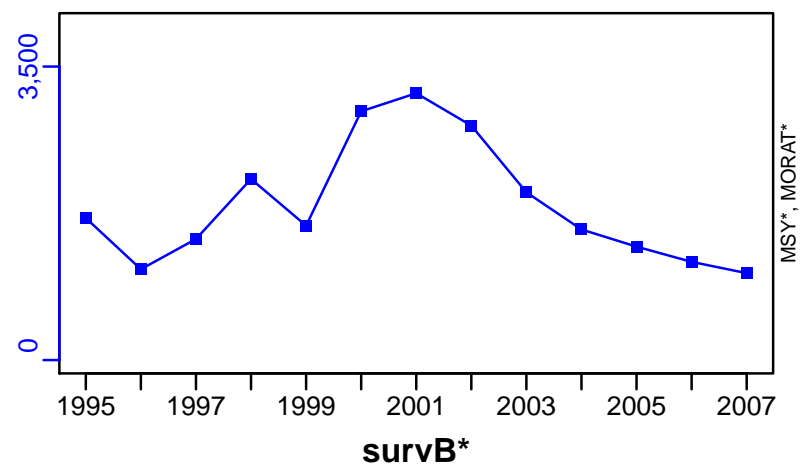
ER\*

Recruits\*



# Grey grunt Central West Africa Gabon–Angola [GGRUNTCWAGAB–AGO]

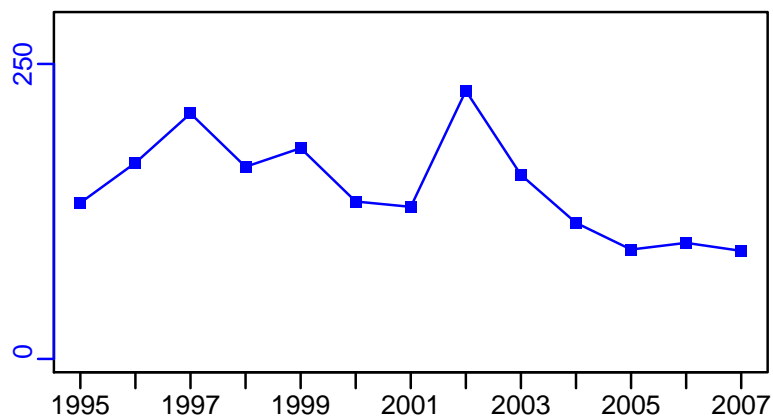
TC–MT, TL\*, RecC\* (1995–2007–CHING)



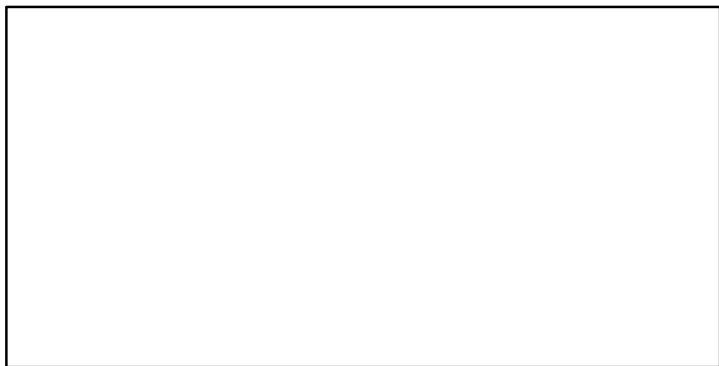
TAC\*, Cpair\*, Cadv\*



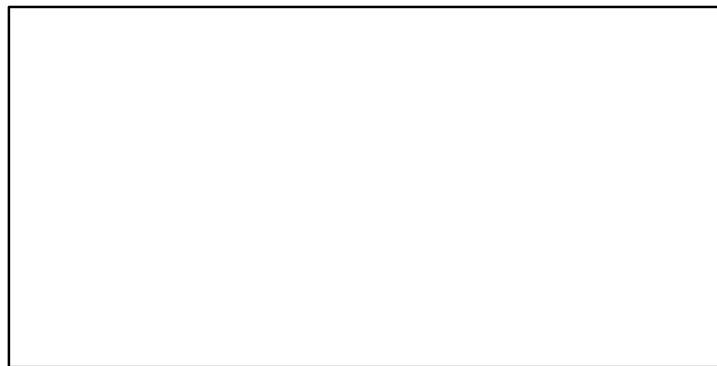
CPUE–kg/day (1995–2007–CHING)



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Grey grunt Central West Africa Guinea-Liberia [GGRUNTCWAGIN-LBR]

Metadata	
<b>Scientific Name</b>	Pomadasys spp
<b>Current Assess ID</b>	FAO-DR-GGRUNTCWAGIN-LBR-1994-2007-CHING
<b>Area</b>	Central West Africa Guinea-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

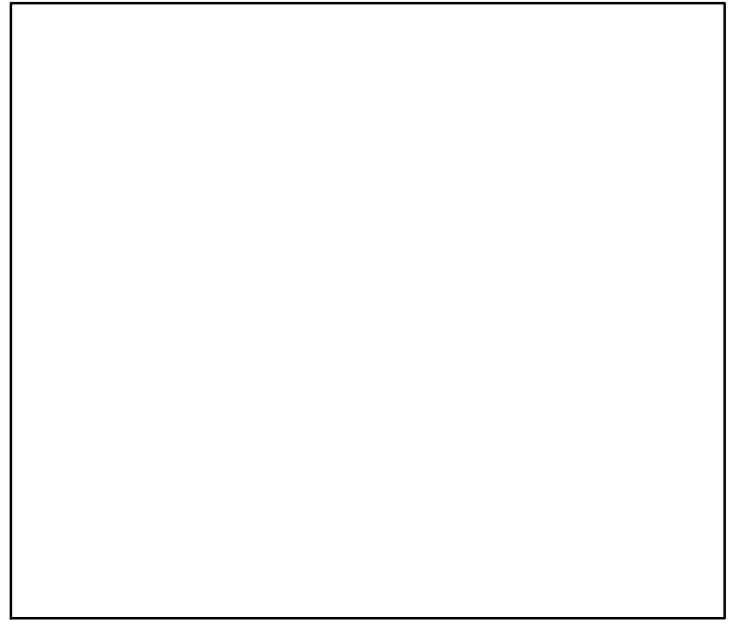
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	1150	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	2020		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



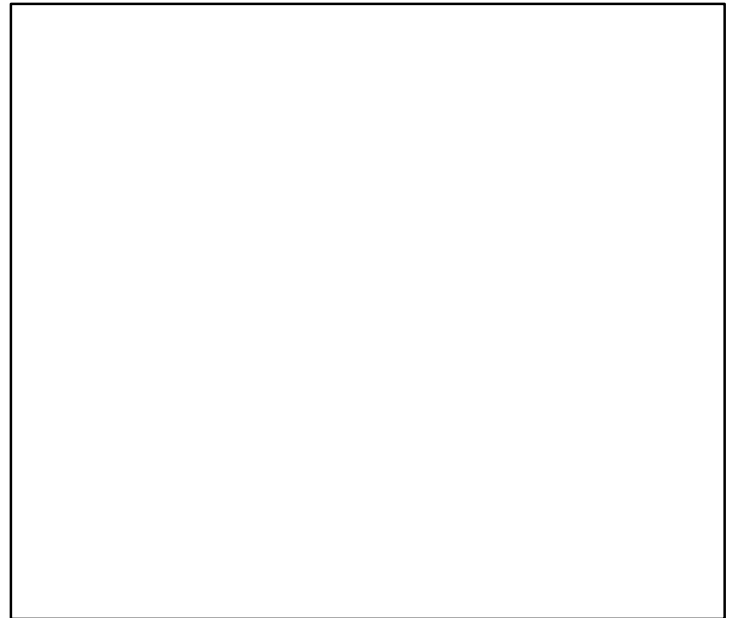
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



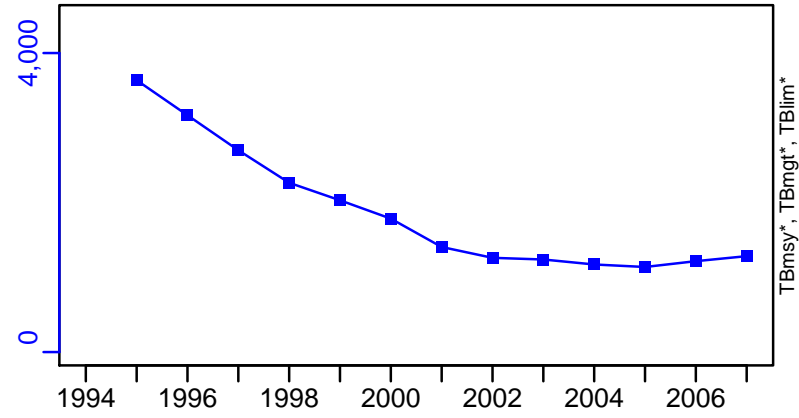
◆ Start Year ◆ End Year \* No Data



# Grey grunt Central West Africa Guinea–Liberia [GGRUNTCWAGIN–LBR]

TB–index (1994–2007–CHING)

SSB\*



TN \*

F\*



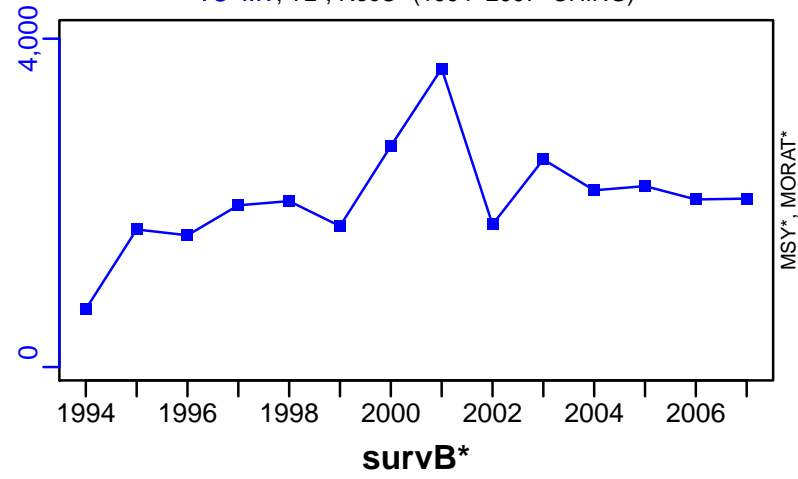
ER\*

Recruits\*



# Grey grunt Central West Africa Guinea-Liberia [GGRUNTCWAGIN-LBR]

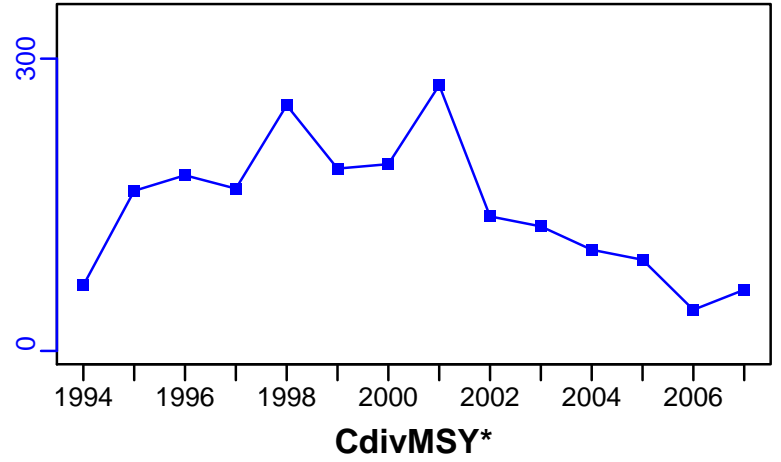
TC-MT, TL\*, RecC\* (1994-2007-CHING)



TAC\*, Cpair\*, Cadv\*



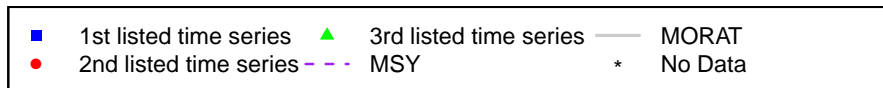
CPUE-MT/day (1994-2007-CHING)



EFFORT\*



CdivMSY\*



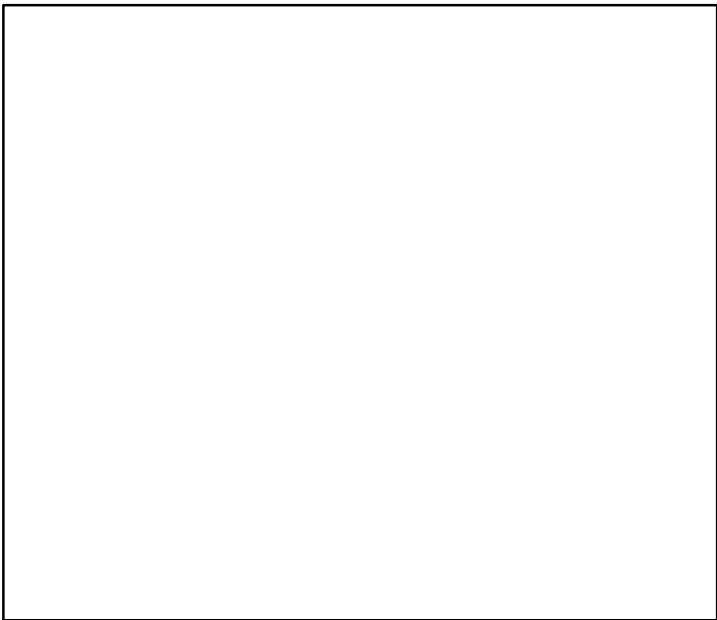
## Hake North West Africa Morocco [HAKENWAMAR]

Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	FAO-DR-HAKENWAMAR-1980-2016-ASHBROOK
<b>Area</b>	North West Africa Morocco
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2016

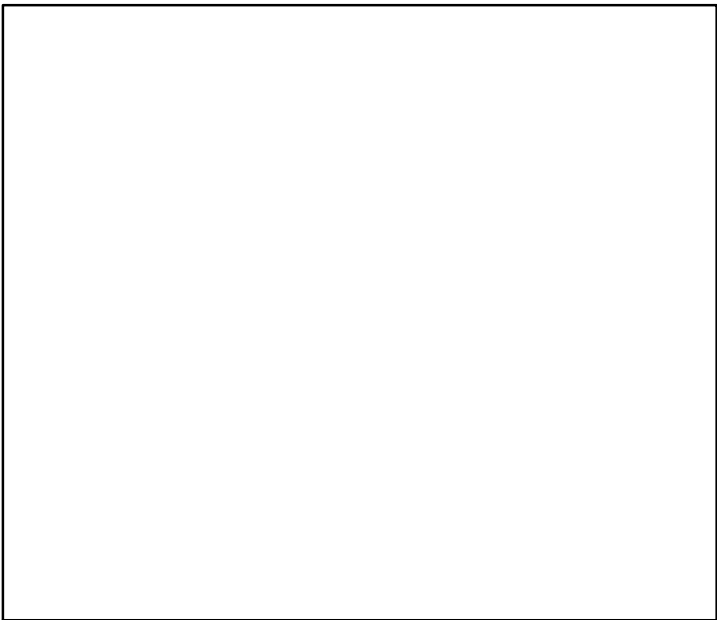
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2016	6232
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	5381		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

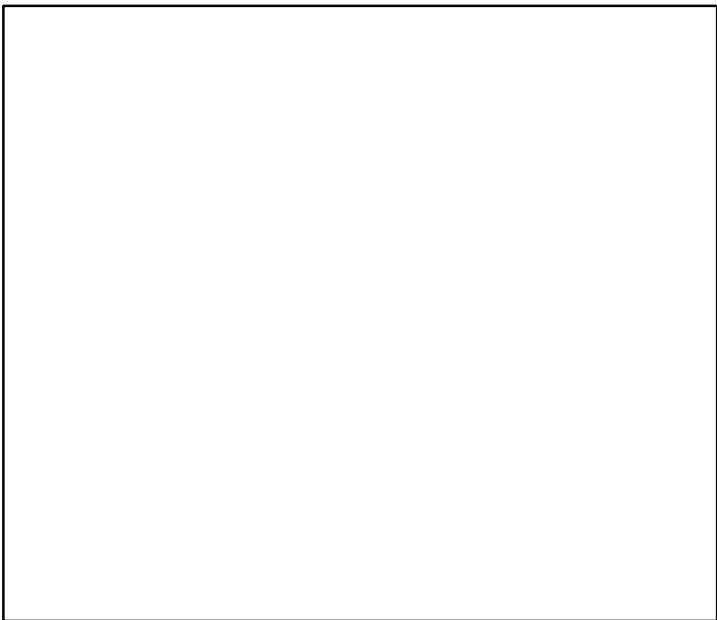
Kobe MSY\*



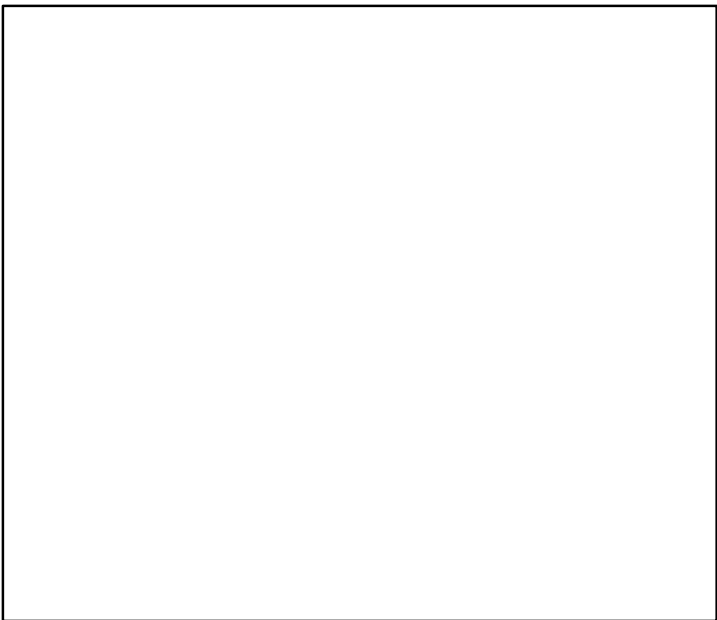
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

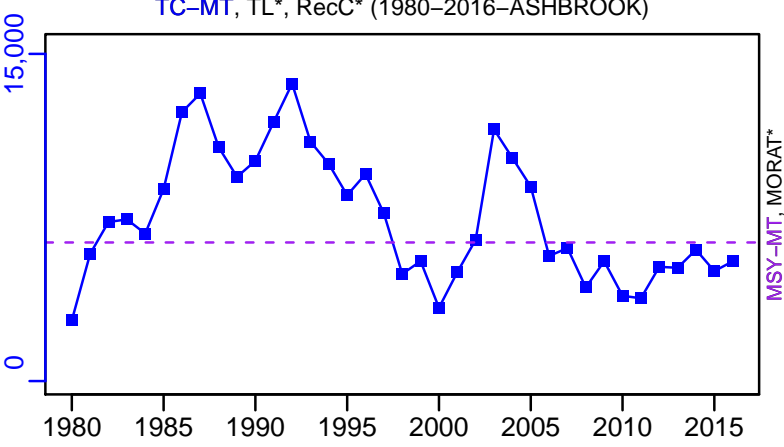


Recruits\*



# Hake North West Africa Morocco [HAKENWAMAR]

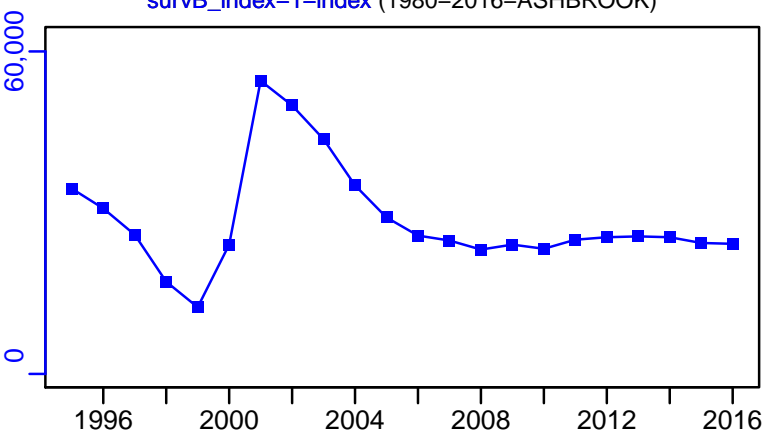
TC-MT, TL\*, RecC\* (1980–2016–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_index-1-index (1980–2016–ASHBROOK)



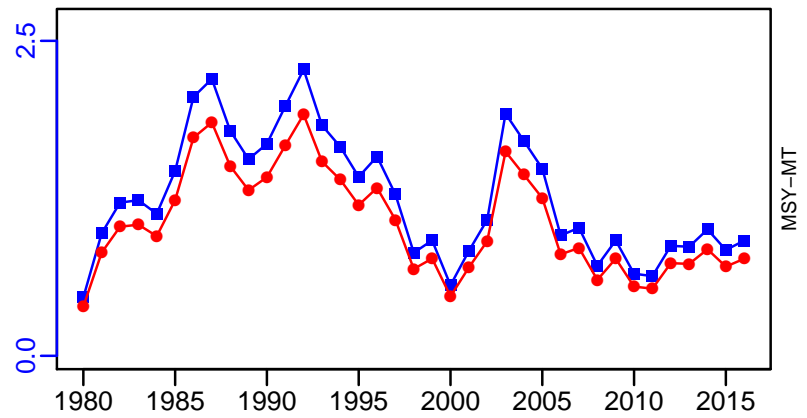
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1980–2016–ASHBROOK)



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

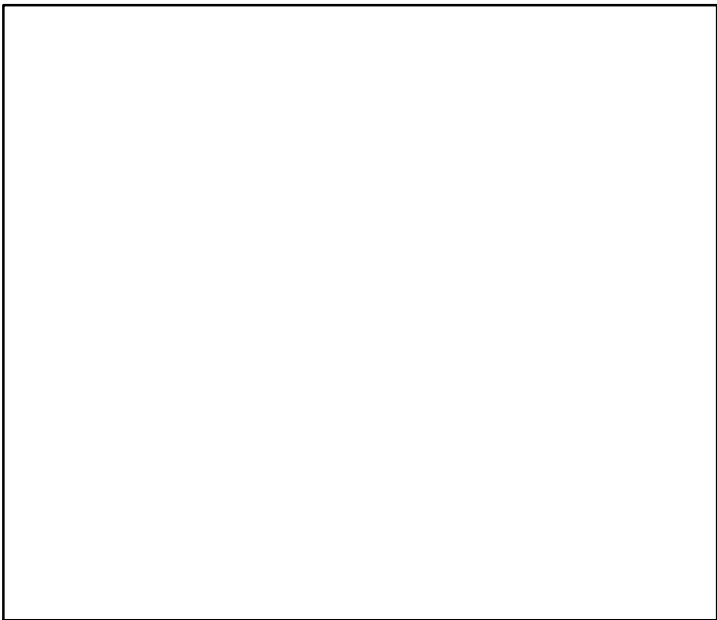
## Hake spp North West Africa [HAKESPPNWA]

Metadata	
<b>Scientific Name</b>	Merluccius spp
<b>Current Assess ID</b>	FAO-DR-HAKESPPNWA-1983-2016-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2016

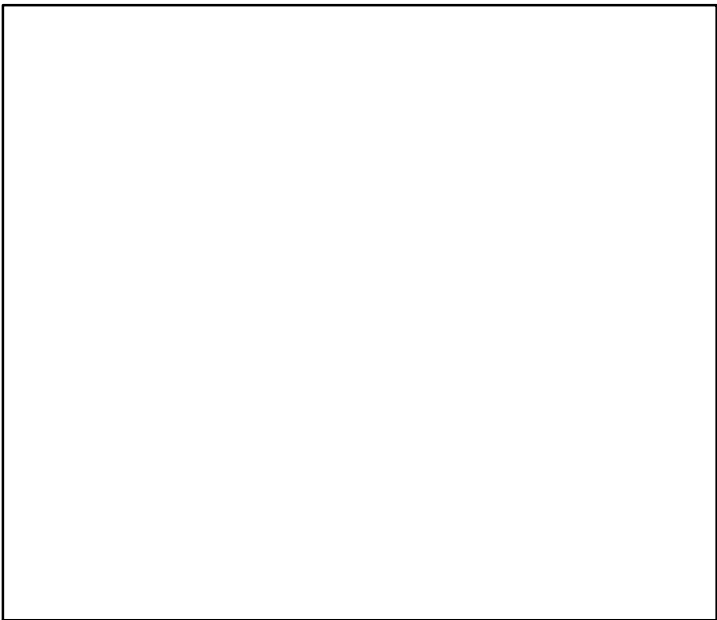
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2016	10,816
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	16,972		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

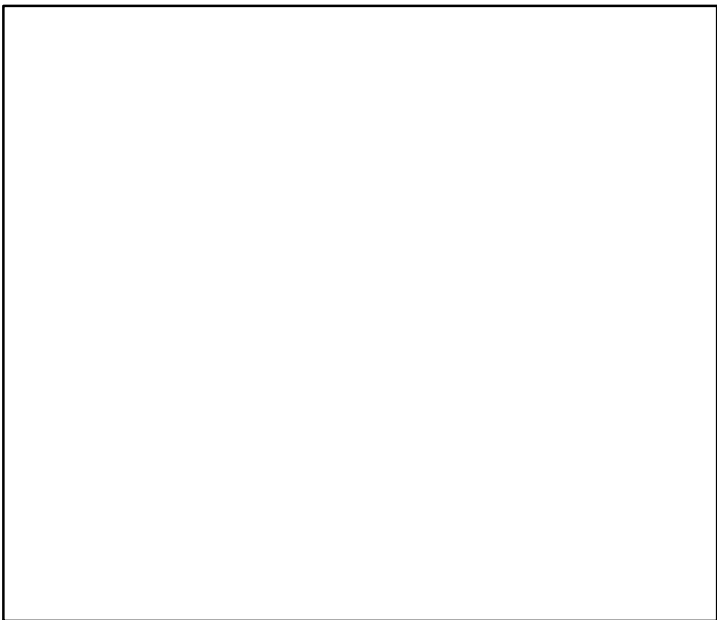
Kobe MSY\*



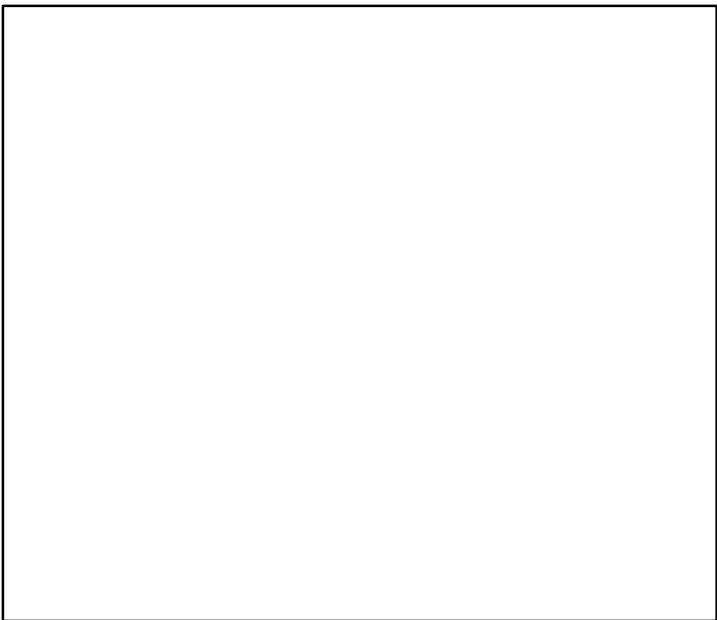
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data



Hake spp North West Africa [HAKESPPNWA]

TB\*



SSB\*



TN \*



F\*



ER\*

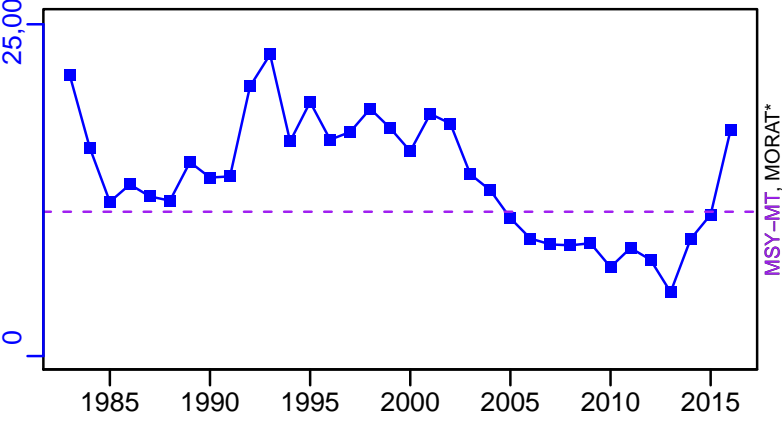


Recruits\*



# Hake spp North West Africa [HAKESPPNWA]

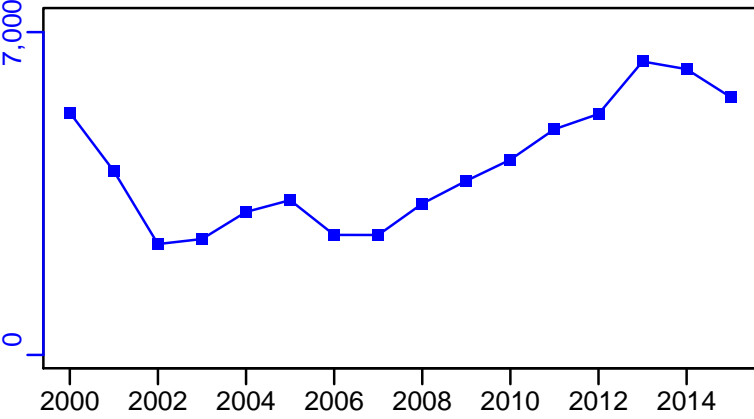
TC-MT, TL\*, RecC\* (1983–2016–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



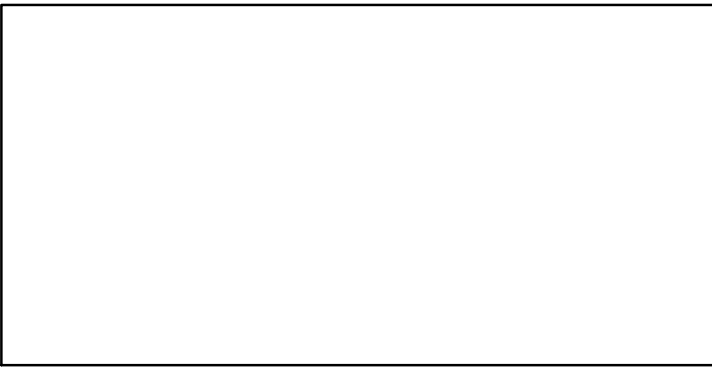
survB\_index-1-index (1983–2016–ASHBROOK)



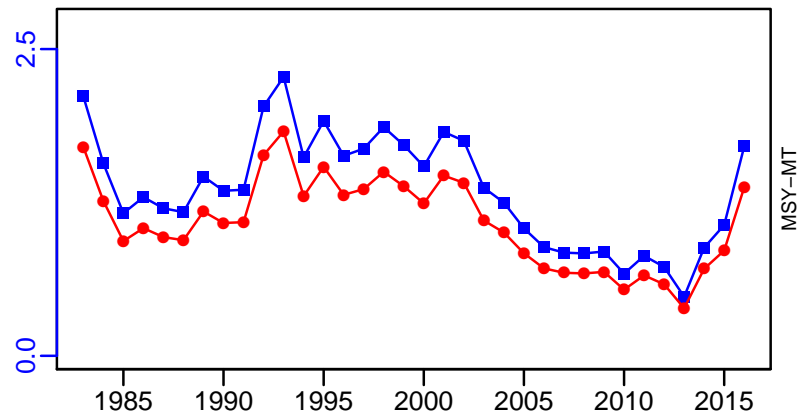
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1983–2016–ASHBROOK)



- 1st listed time series    ▲ 3rd listed time series    — MORAT
- 2nd listed time series    - - - MSY    \* No Data

## Horse mackerel North West Africa [HMACKNWA]

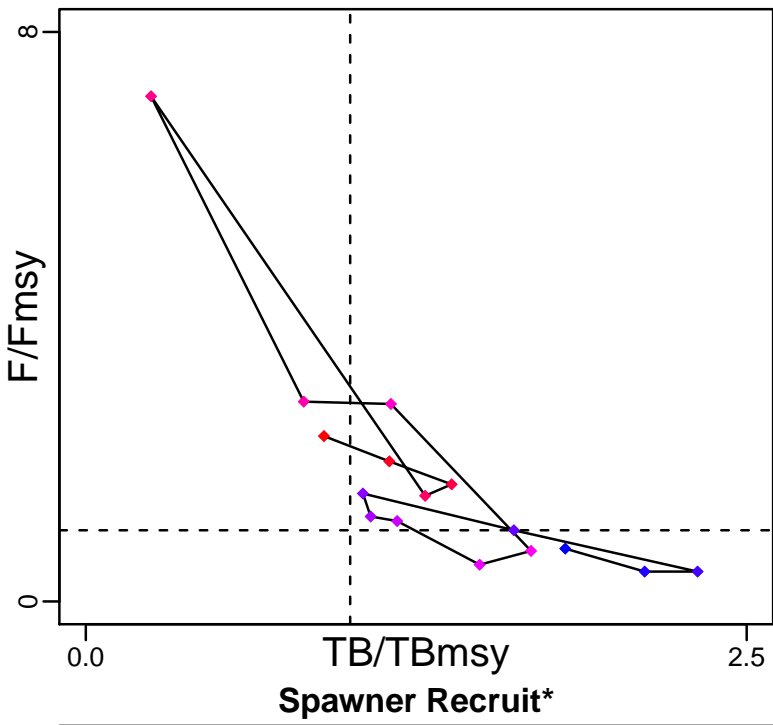
Metadata	
<b>Scientific Name</b>	Trachurus trachurus
<b>Current Assess ID</b>	FAO-SPNWA-HMACKNWA-1990-2016-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2010, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2010	169,817
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2010	0.31
<b>ERmsy</b>	ERmsy-est-ratio	2010	0.573
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2010	97,254
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

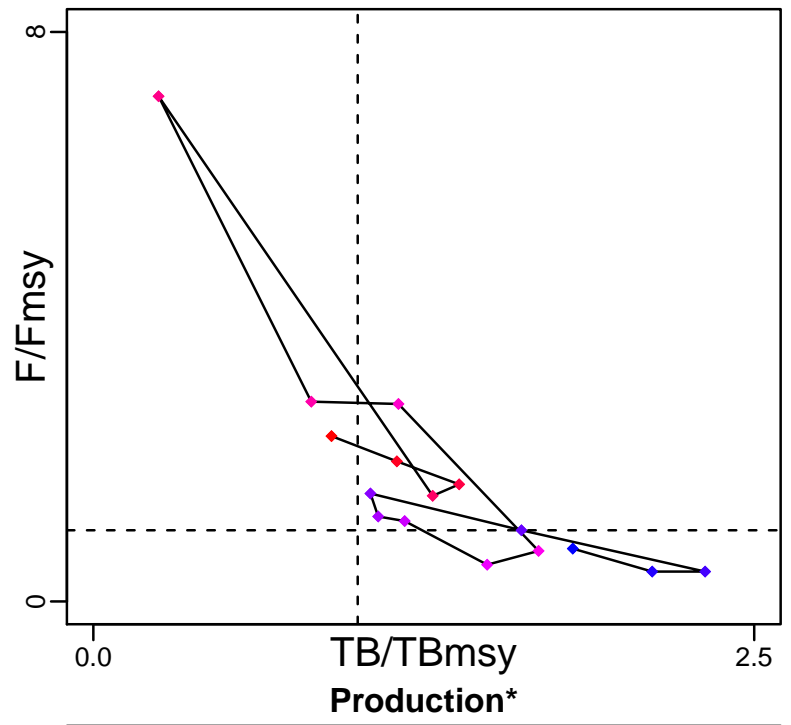
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	153,000	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2010	0.72	-	-
<b>ER</b>	ER-calc-ratio	2010	0.719	-	-
<b>TC</b>	TC-MT	2016	158,523		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2010	0.901		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	2.323		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2010	1.255		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Horse mackerel North West Africa [HMACKNWA]

Kobe MSYpref (1990–2010–CHING)



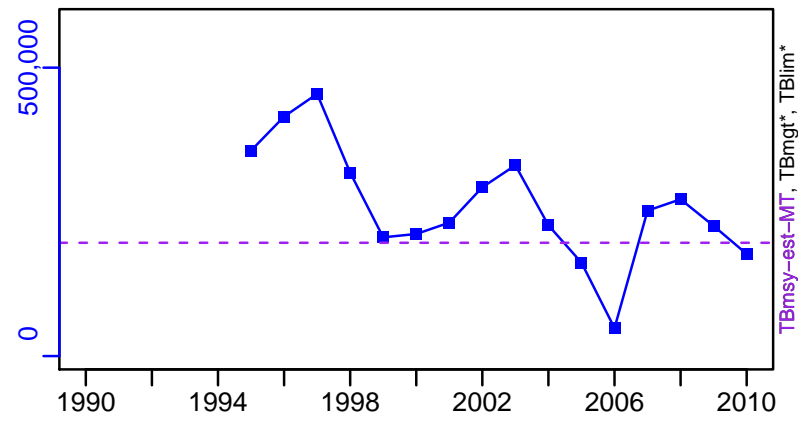
Kobe MGTpref (1990–2010–CHING)



◆ Start Year ◆ End Year \* No Data

# Horse mackerel North West Africa [HMACKNWA]

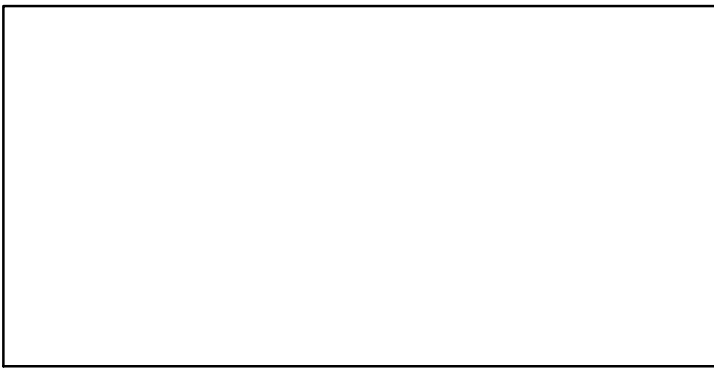
TB-MT (1990-2010-CHING)



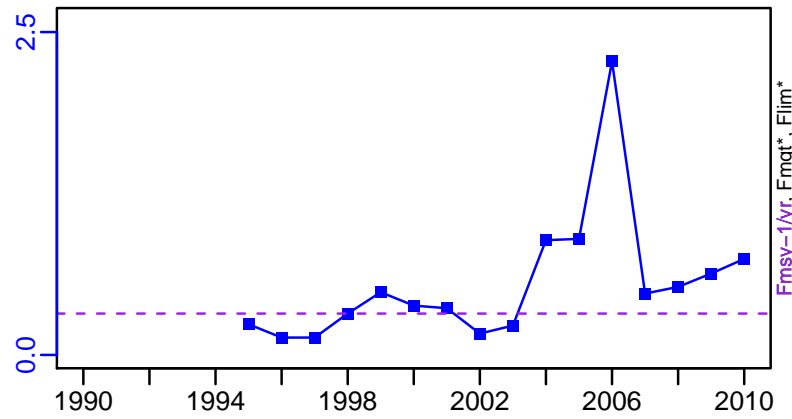
SSB\*



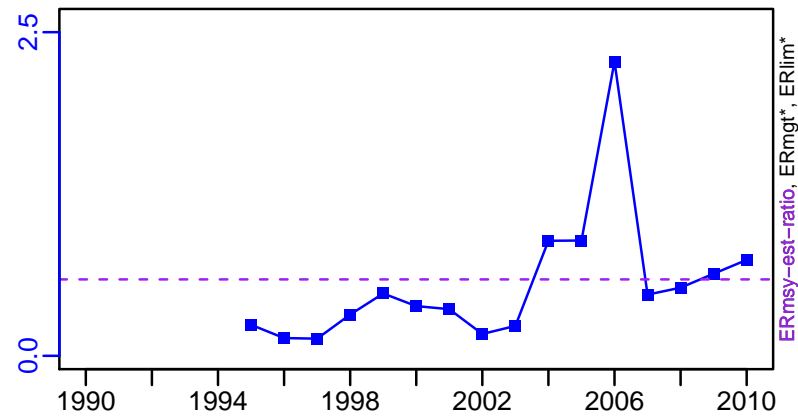
TN \*



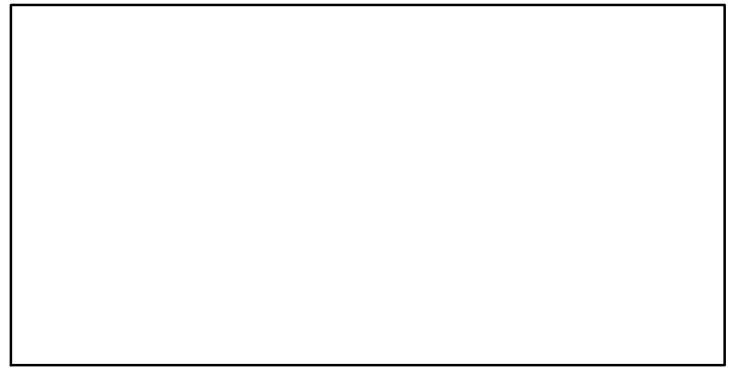
F-1/yr (1990-2010-CHING)



ER-calc-ratio (1990-2010-CHING)

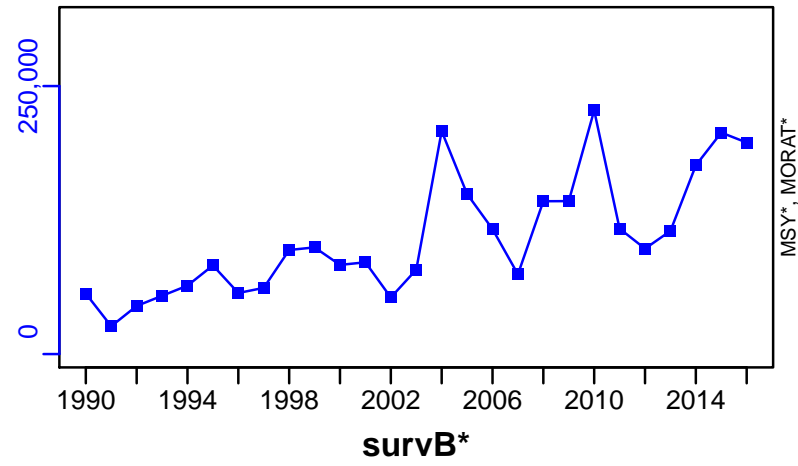


Recruits\*



# Horse mackerel North West Africa [HMACKNWA]

TC-MT, TL\*, RecC\* (1990-2016-ASHBROOK)



TAC\*, Cpair\*, Cadv\*



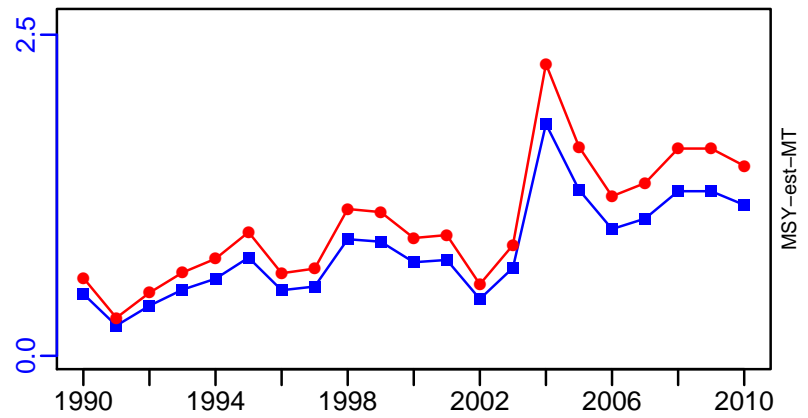
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1990-2010-CHING)



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Large eye dentex Central West Africa Angola [LDENTCWAAGO]

Metadata	
<b>Scientific Name</b>	Dentex macrophthalmus
<b>Current Assess ID</b>	FAO-DR-LDENTCWAAGO-1995-2007-CHING
<b>Area</b>	Central West Africa Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

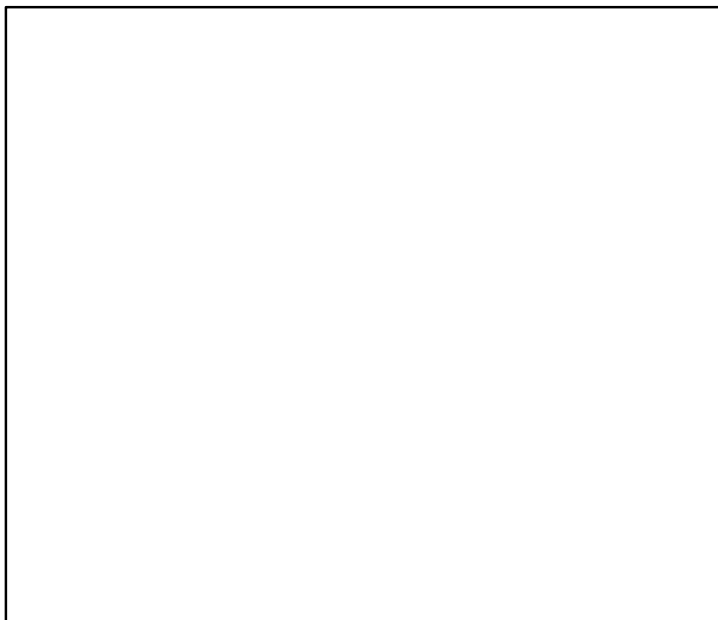
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	155	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	19,100		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

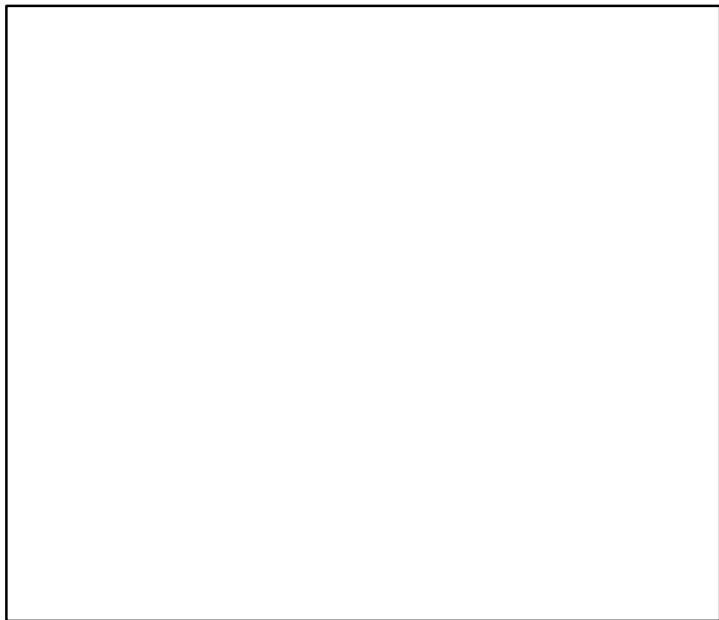
**Kobe MSY\***



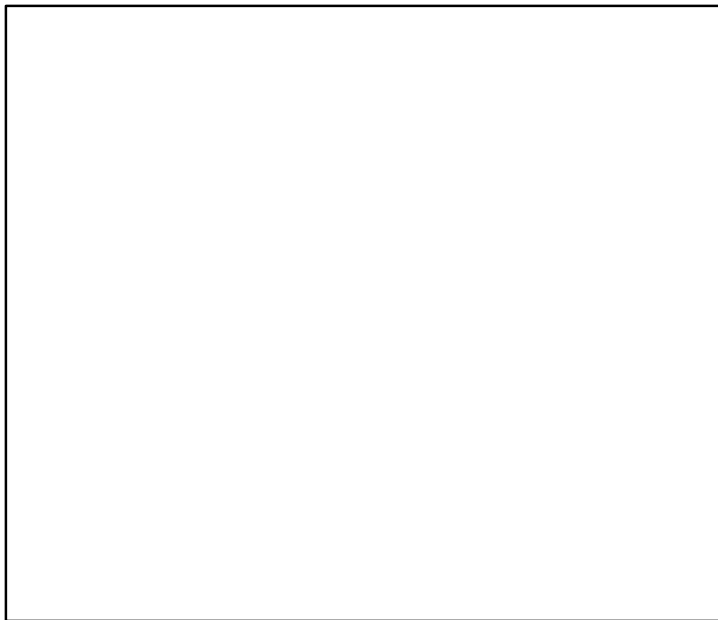
**Kobe MGT\***



**Spawner Recruit\***



**Production\***

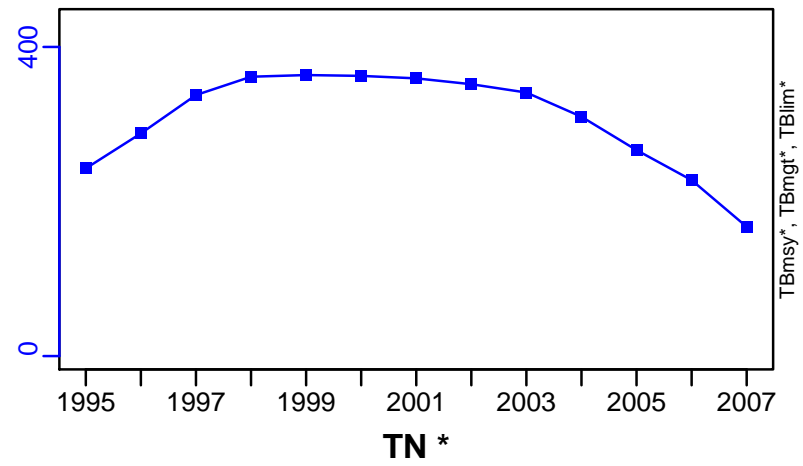


◆ Start Year ◆ End Year \* No Data



# Large eye dentex Central West Africa Angola [LDENTCWAAGO]

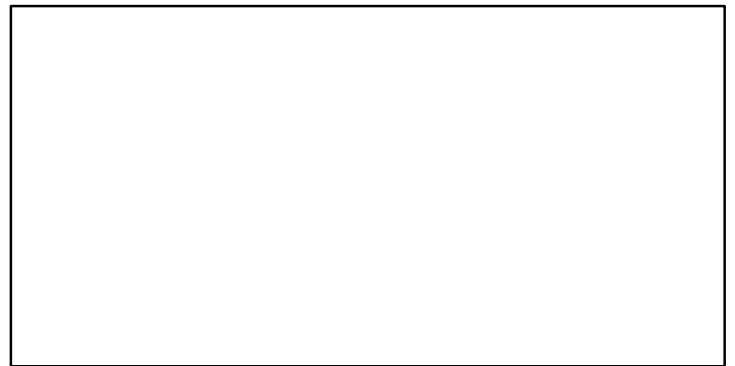
TB-index (1995–2007–CHING)



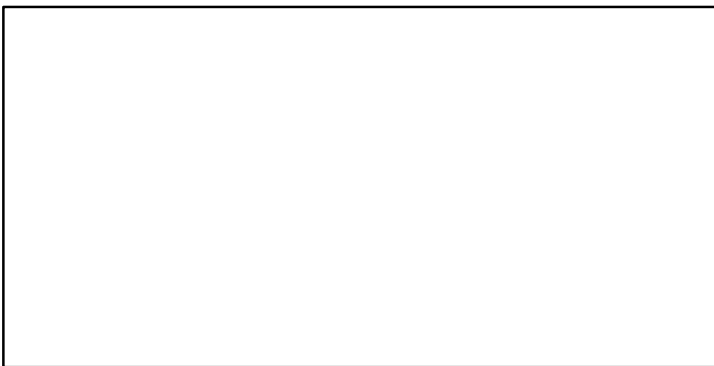
**SSB\***



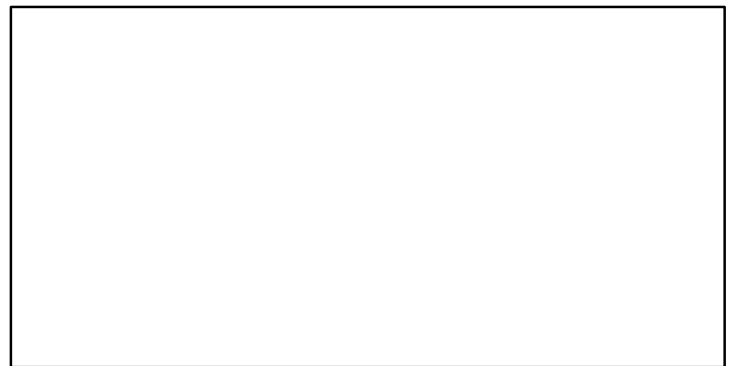
**F\***



**ER\***



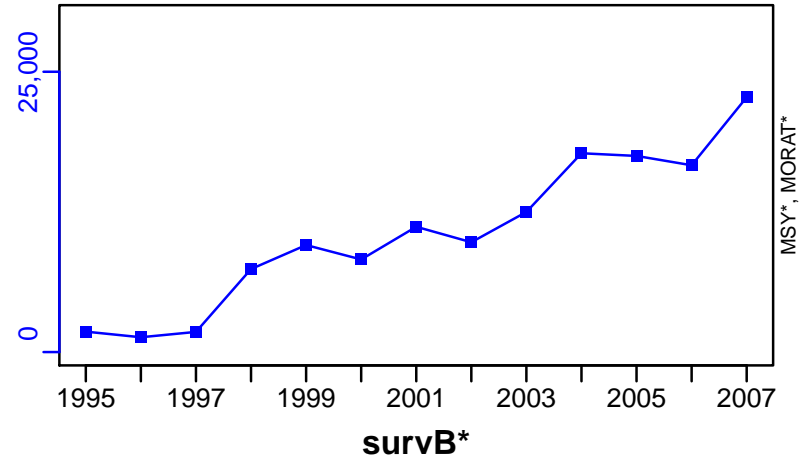
**Recruits\***



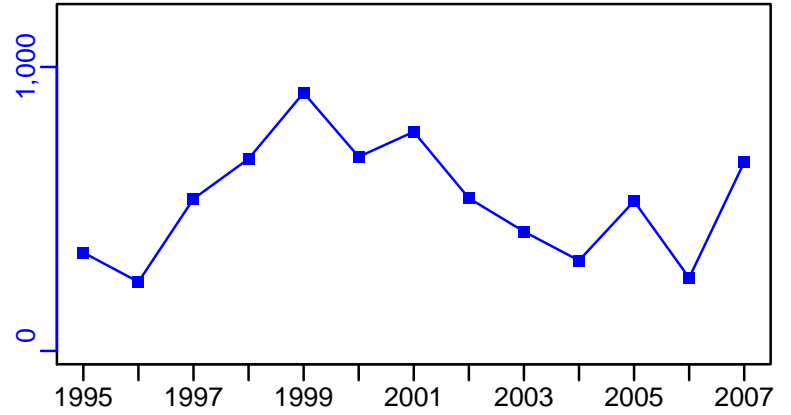
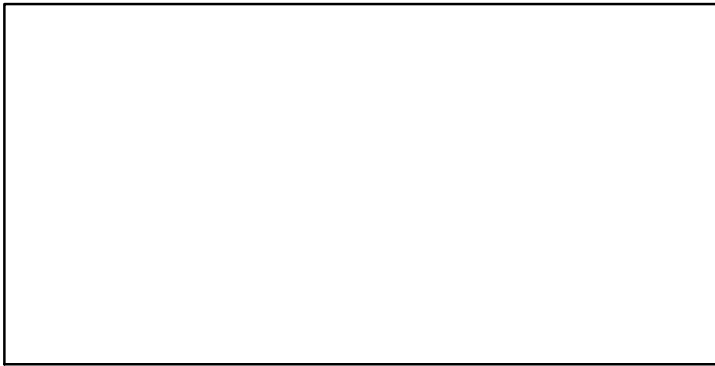
# Large eye dentex Central West Africa Angola [LDENTCWAAGO]

TC-MT, TL\*, RecC\* (1995-2007-CHING)

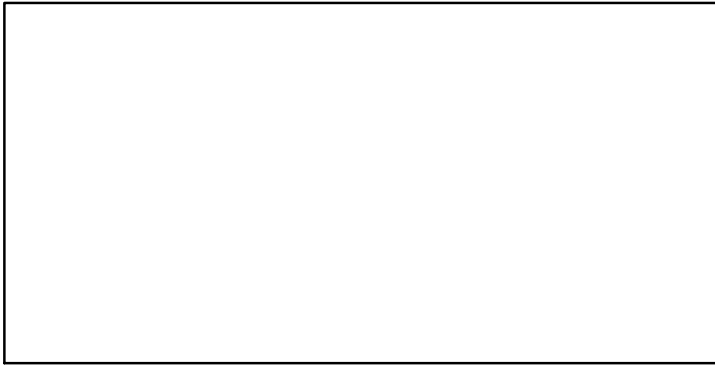
TAC\*, Cpair\*, Cadv\*



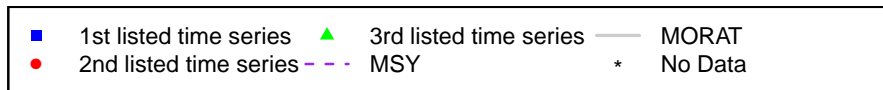
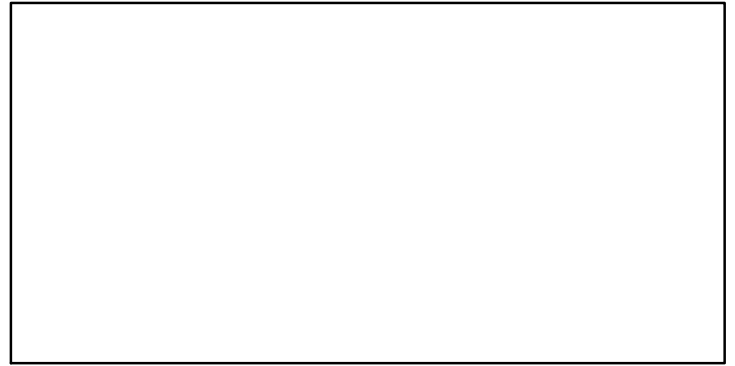
CPUE-kg/day (1995-2007-CHING)



EFFORT\*



CdivMSY\*



## Madeiran sardinella Central West Africa Cote Divoire-Benin [MSARDCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Sardinella maderensis
<b>Current Assess ID</b>	FAO-SPNWA-MSARDCWACIV-BEN-1990-2017-ASHBROOK
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	10,717		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	7.08		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	0.09		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

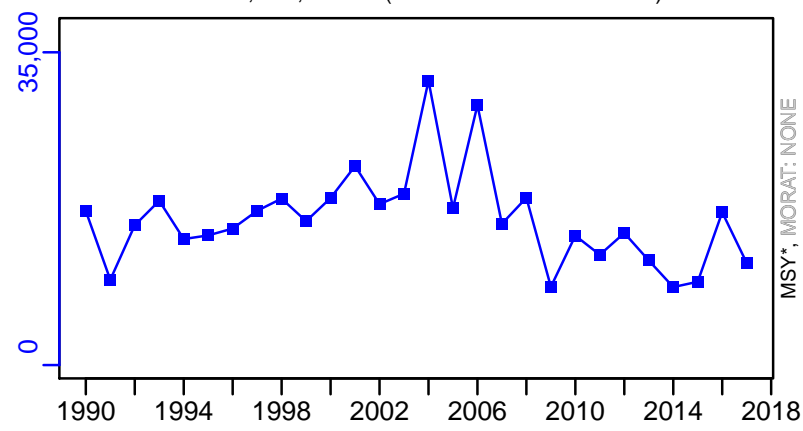


Recruits\*



Madeiran sardinella Central West Africa Cote Divoire–Benin [MSARDCWACIV–BEN]

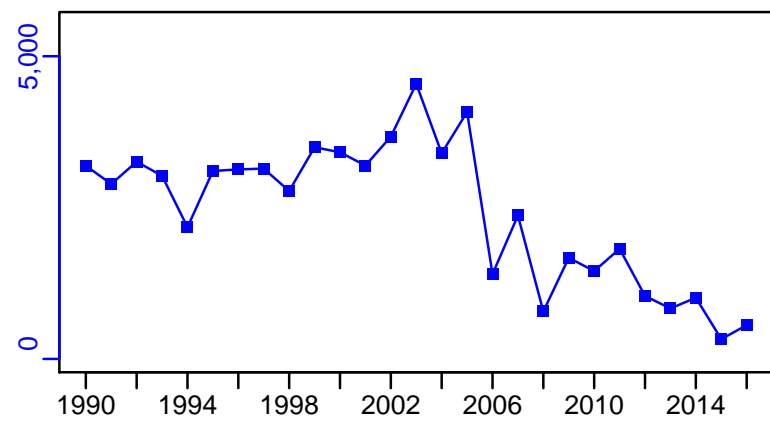
TC–MT, TL\*, RecC\* (1990–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_index–index (1990–2017–ASHBROOK)



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

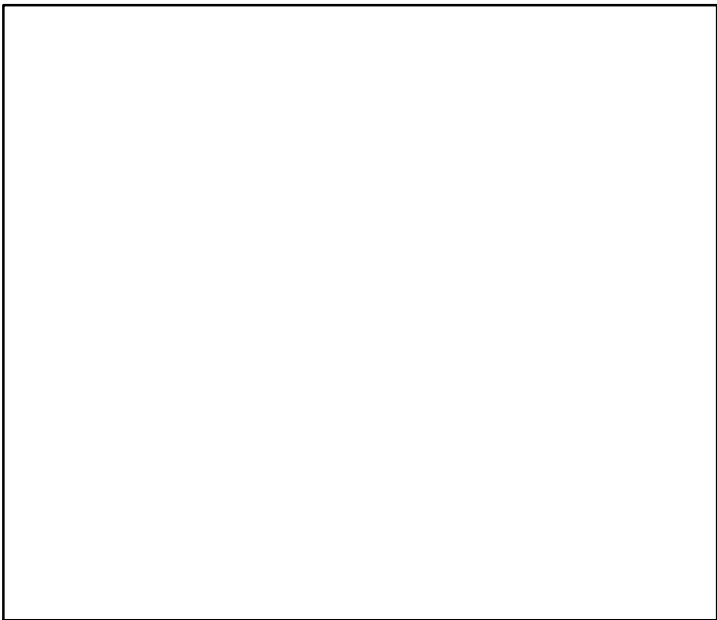
## Madeiran sardinella North West Africa [MSARDNWA]

Metadata	
<b>Scientific Name</b>	Sardinella maderensis
<b>Current Assess ID</b>	FAO-SPNWA-MSARDNWA-1990-2016-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2016

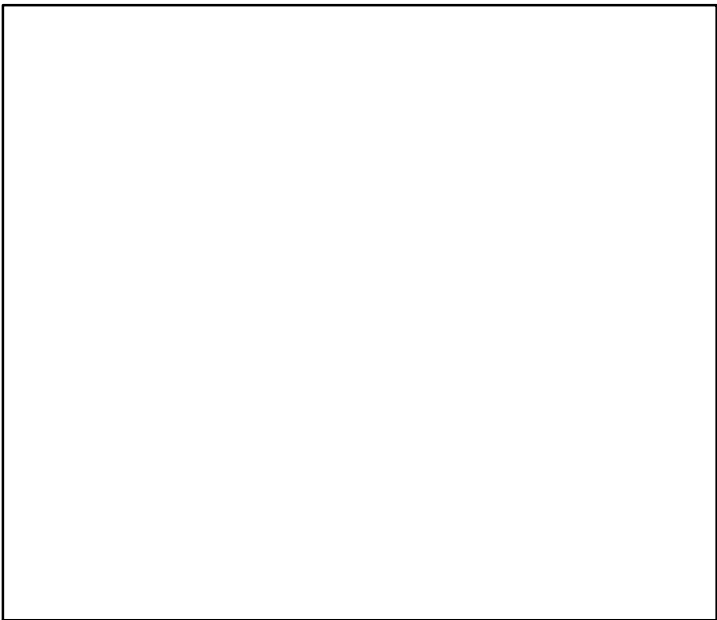
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	223,607		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data



TB\*



SSB\*



TN \*



F\*



ER\*



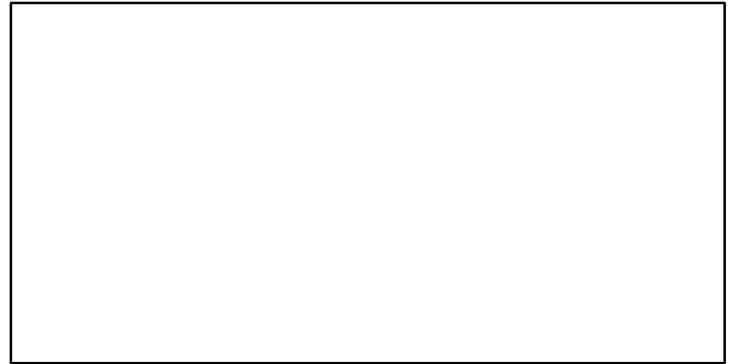
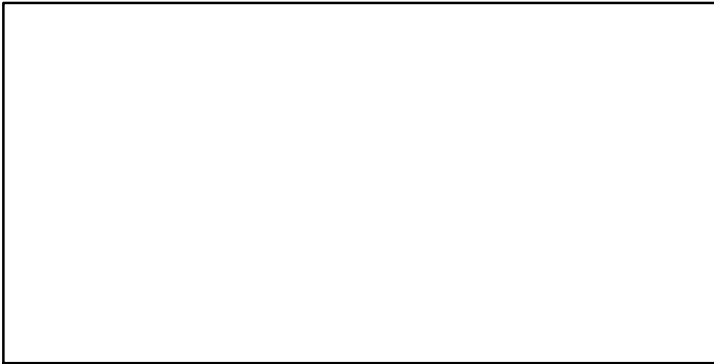
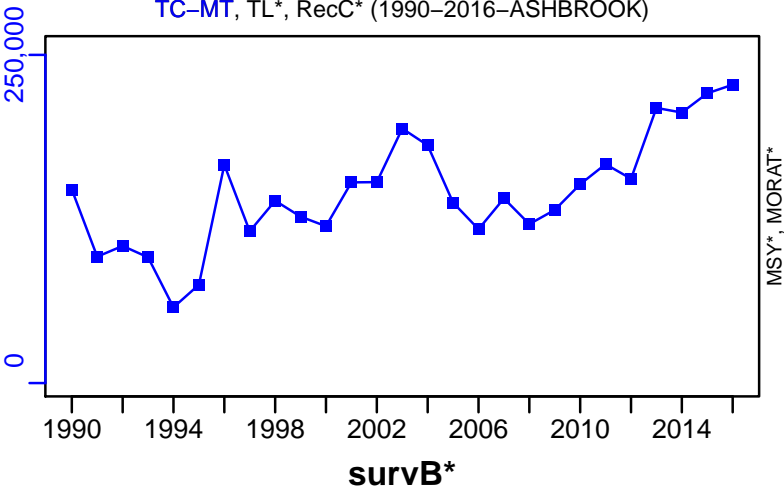
Recruits\*



Madeiran sardinella North West Africa [MSARDNWA]

TC-MT, TL\*, RecC\* (1990–2016–ASHBROOK)

TAC\*, Cpair\*, Cadv\*



## Octopus Central West Africa Guinea Bissau [OCTOCWAGNB]

Metadata	
<b>Scientific Name</b>	Octopus vulgaris
<b>Current Assess ID</b>	FAO-DR-OCTOCWAGNB-1990-2007-CHING
<b>Area</b>	Central West Africa Guinea Bissau
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	1160		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

**TB\***



**SSB\***



**TN \***



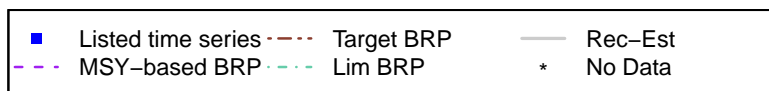
**F\***



**ER\***



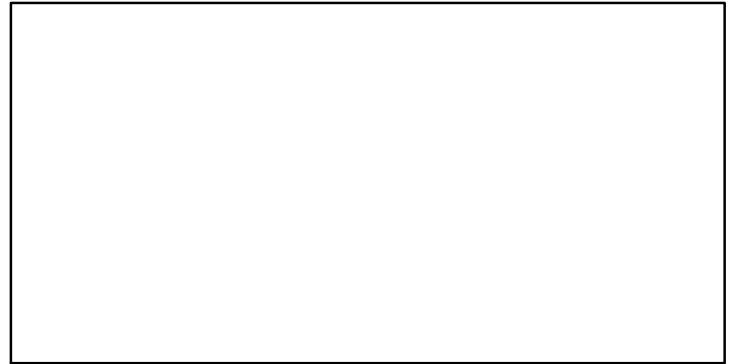
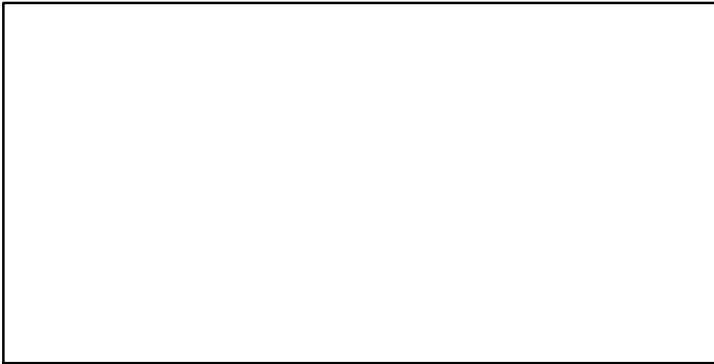
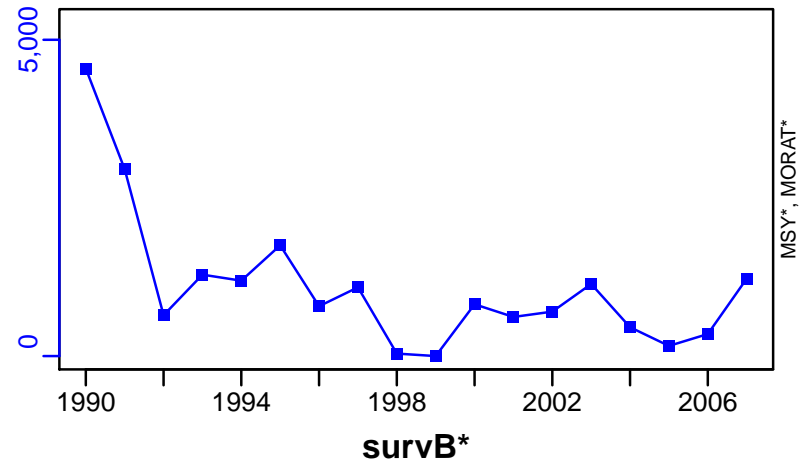
**Recruits\***



# Octopus Central West Africa Guinea Bissau [OCTOCWAGNB]

TC-MT, TL\*, RecC\* (1990-2007-CHING)

TAC\*, Cpair\*, Cadv\*



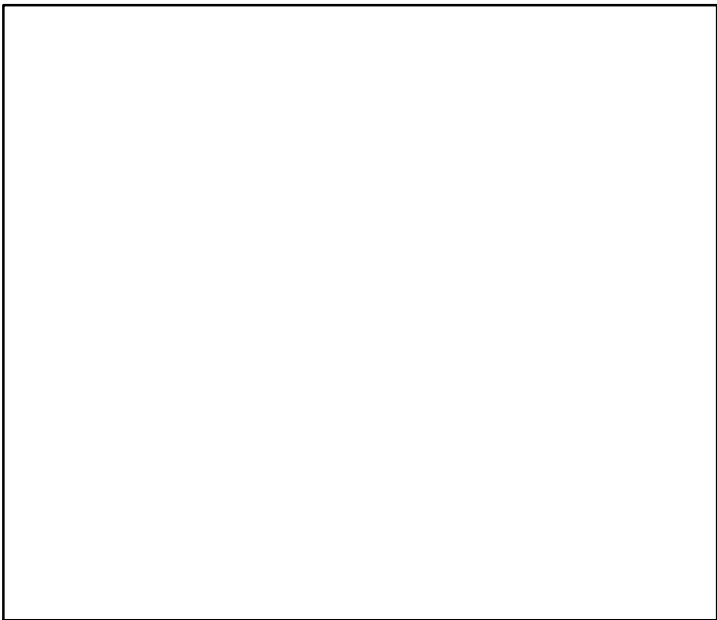
## Red pandora Central West Africa Cote Divoire-Benin [RPANDCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Pagellus bellottii
<b>Current Assess ID</b>	FAO-DR-RPANDCWACIV-BEN-1990-2007-CHING
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

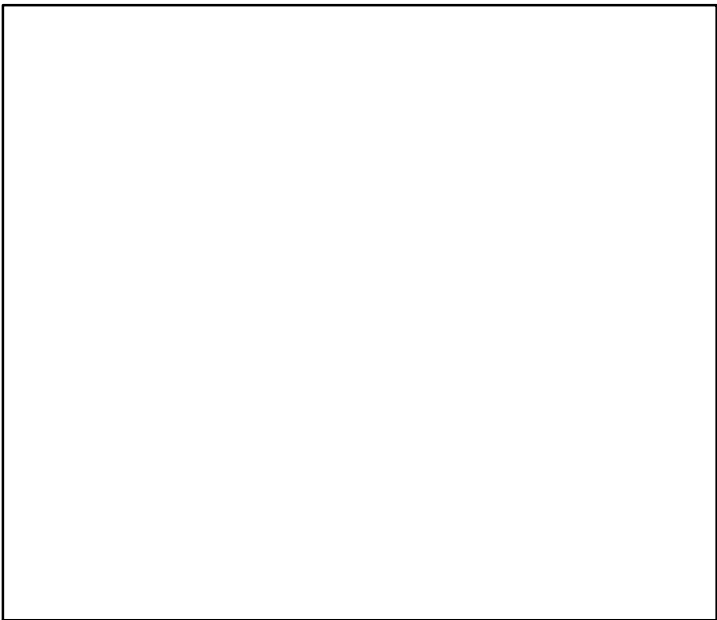
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	16	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	8170		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*

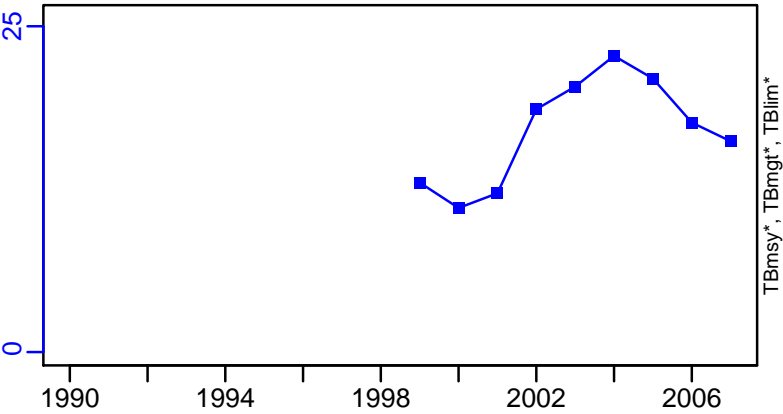


◆ Start Year   ◆ End Year   \* No Data



# Red pandora Central West Africa Cote Divoire-Benin [RPANDCWACIV-BEN]

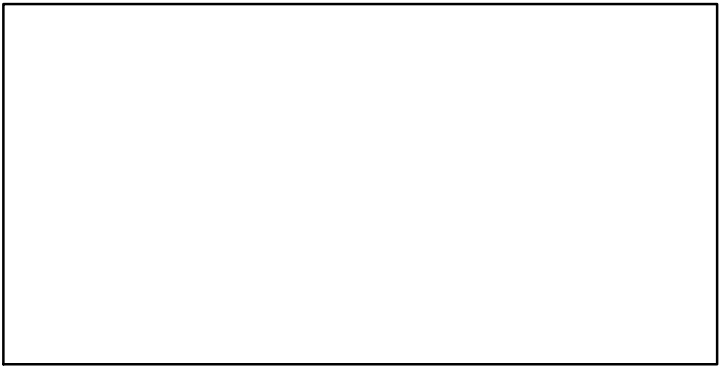
TB-index (1990-2007-CHING)



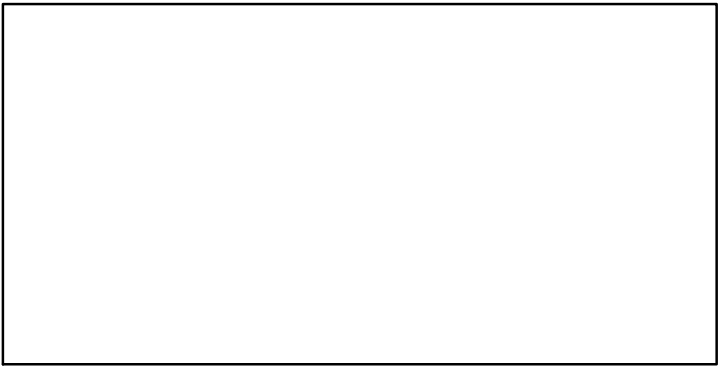
SSB\*



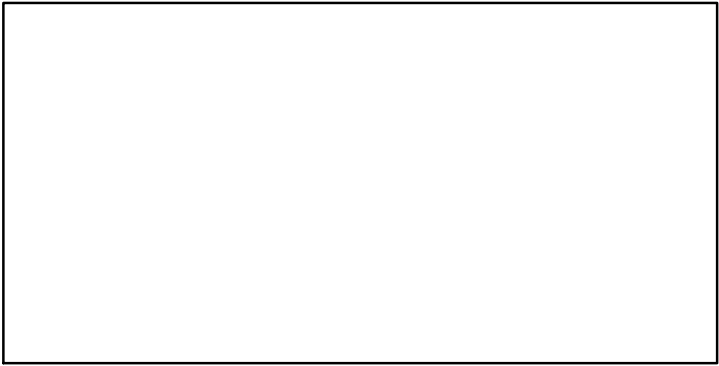
TN \*



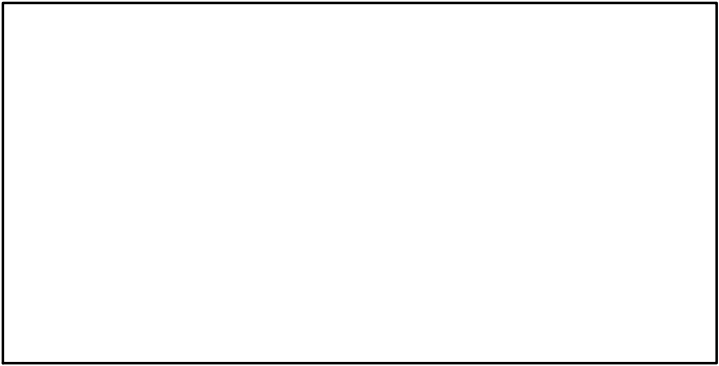
F\*



ER\*



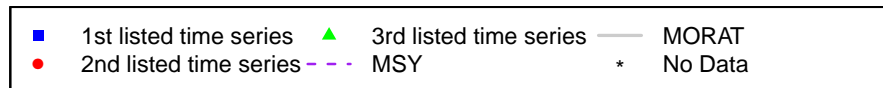
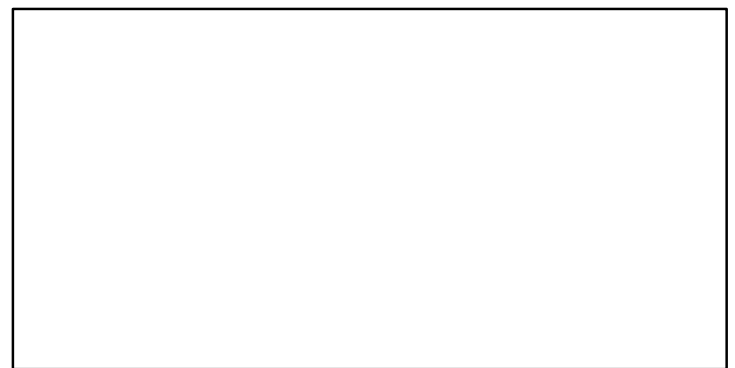
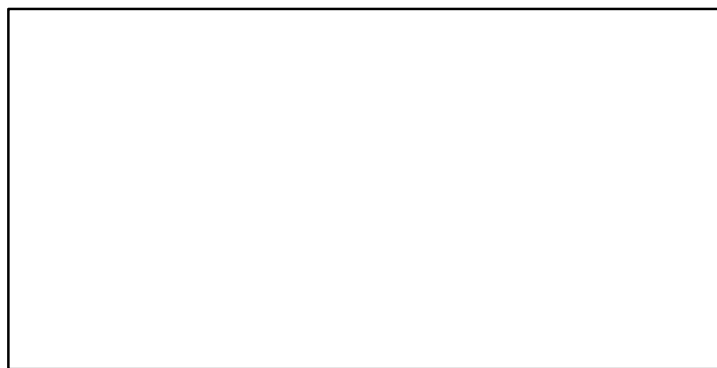
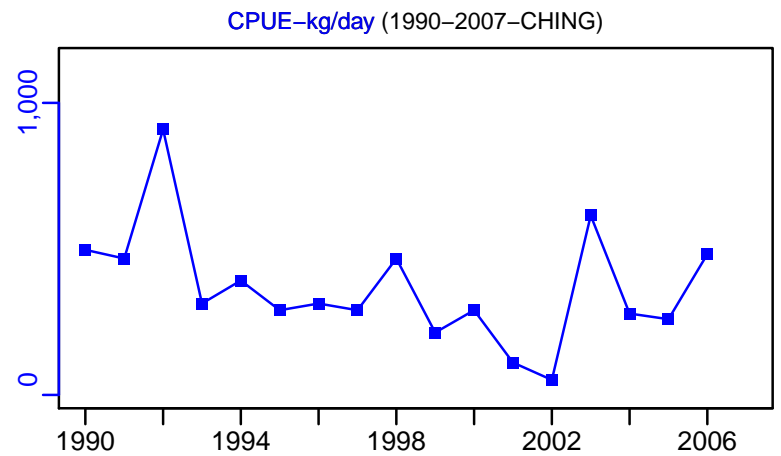
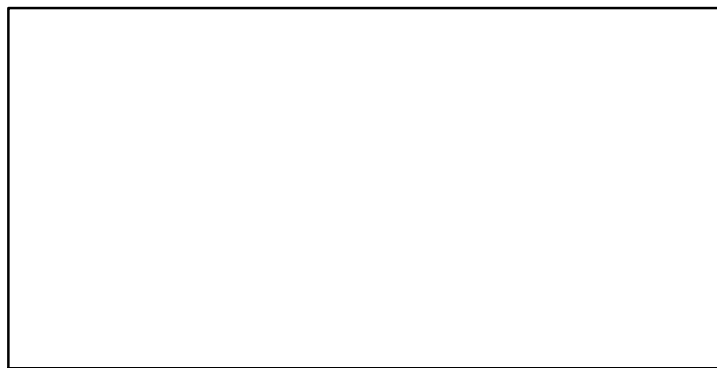
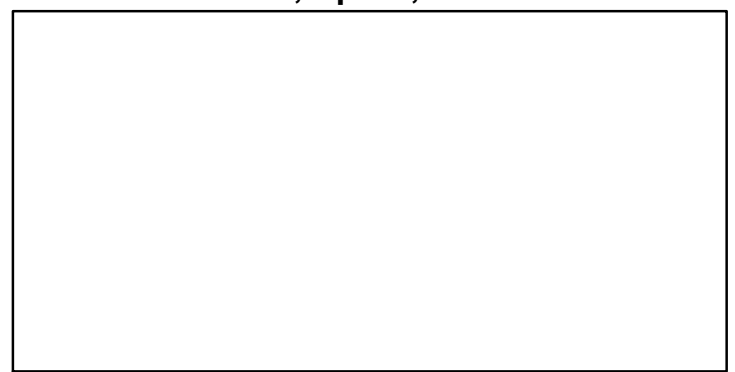
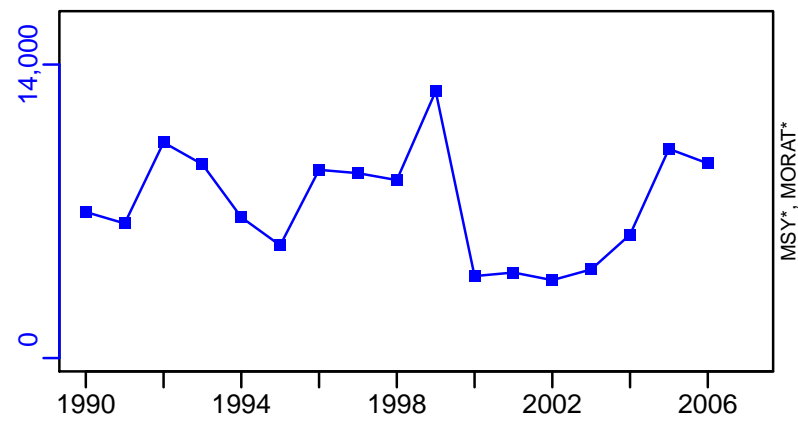
Recruits\*



# Red pandora Central West Africa Cote Divoire–Benin [RPANDCWACIV–BEN]

TC–MT, TL\*, RecC\* (1990–2007–CHING)

TAC\*, Cpair\*, Cadv\*



## Round sardinella Central West Africa Cote Divoire-Benin [RSARDCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Sardinella aurita
<b>Current Assess ID</b>	FAO-SPNWA-RSARDCWACIV-BEN-1990-2017-ASHBROOK
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

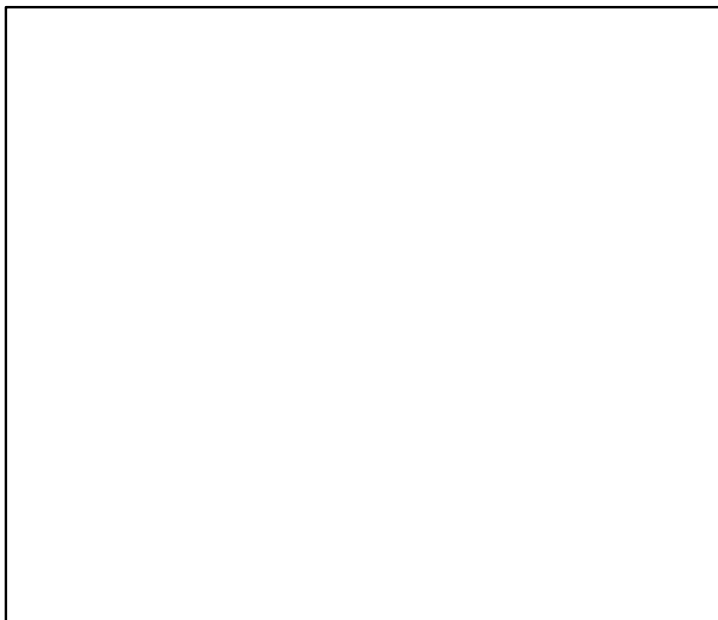
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	58,180		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	5.08		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	0.19		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

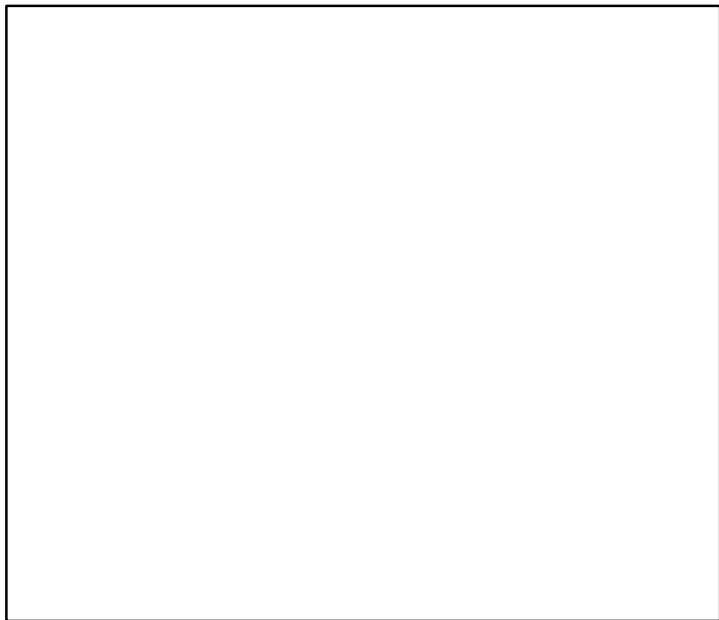
**Kobe MSY\***



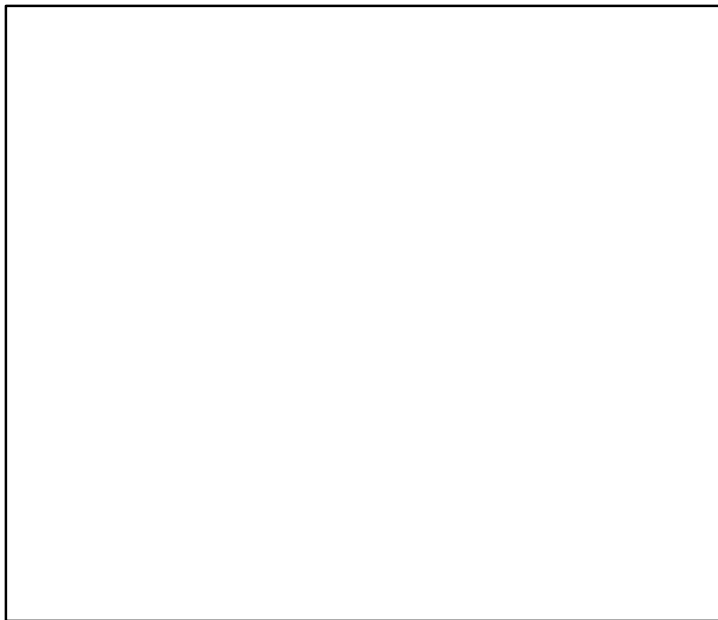
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

TB\*



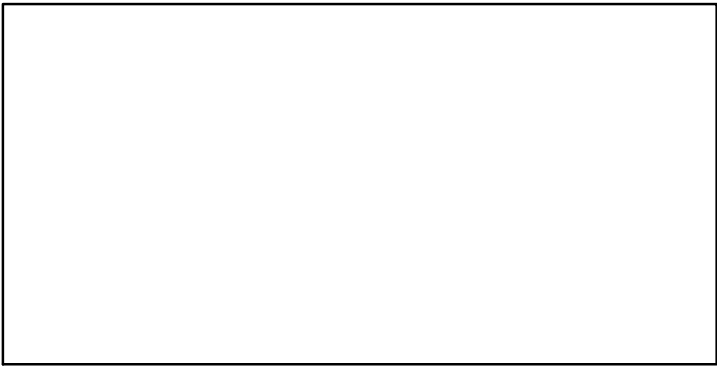
SSB\*



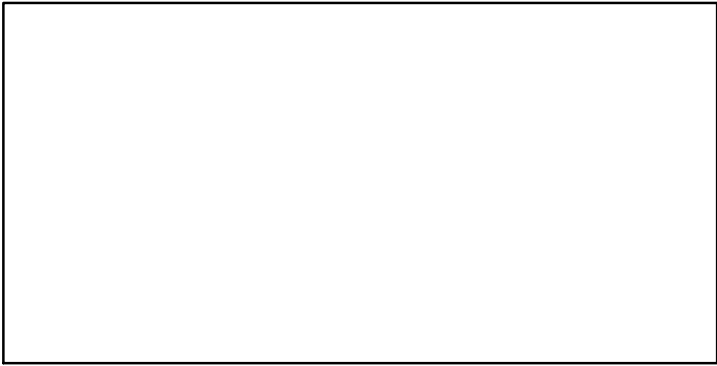
TN \*



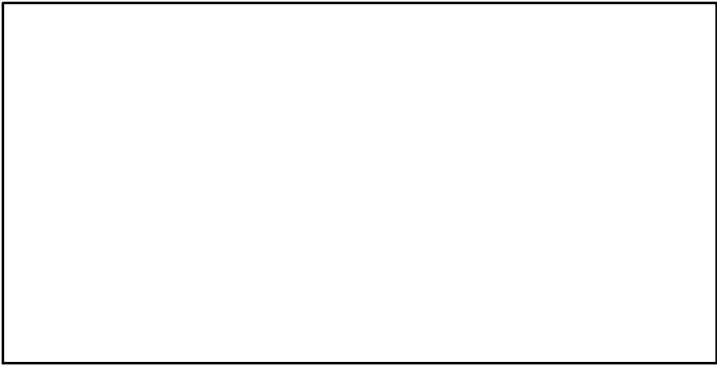
F\*



ER\*

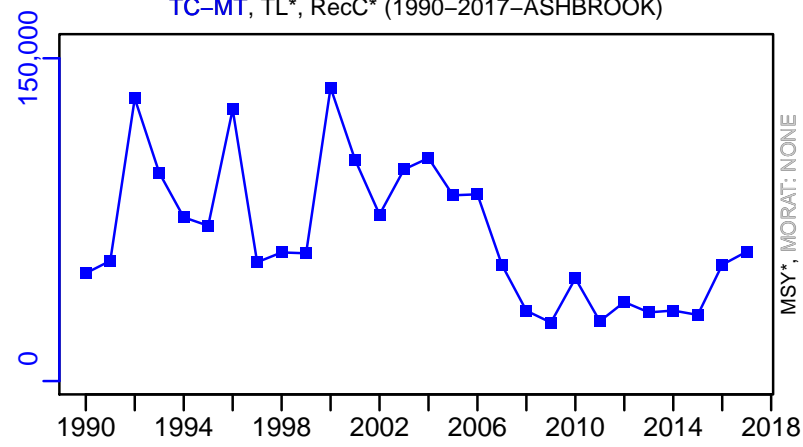


Recruits\*



# Round sardinella Central West Africa Cote Divoire–Benin [RSARDCWACIV–BEN]

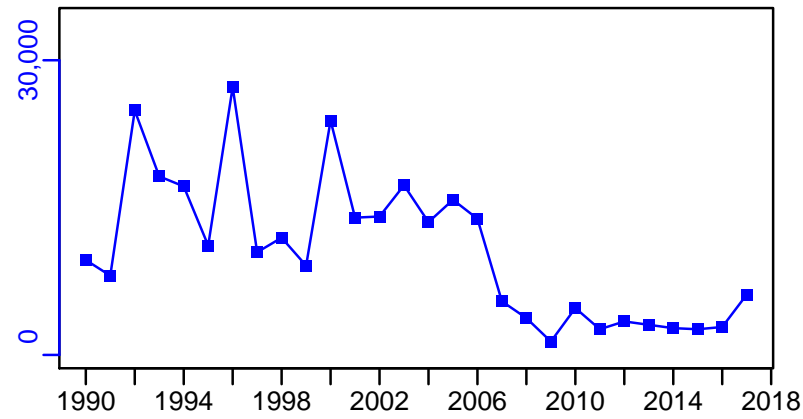
TC–MT, TL\*, RecC\* (1990–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_index–index (1990–2017–ASHBROOK)



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Round sardinella North West Africa [RSARDNWA]

Metadata	
<b>Scientific Name</b>	Sardinella aurita
<b>Current Assess ID</b>	FAO-SPNWA-RSARDNWA-1990-2016-ASHBROOK
<b>Area</b>	North West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	501,956		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data



Round sardinella North West Africa [RSARDNWA]

TB\*



SSB\*



TN \*



F\*



ER\*

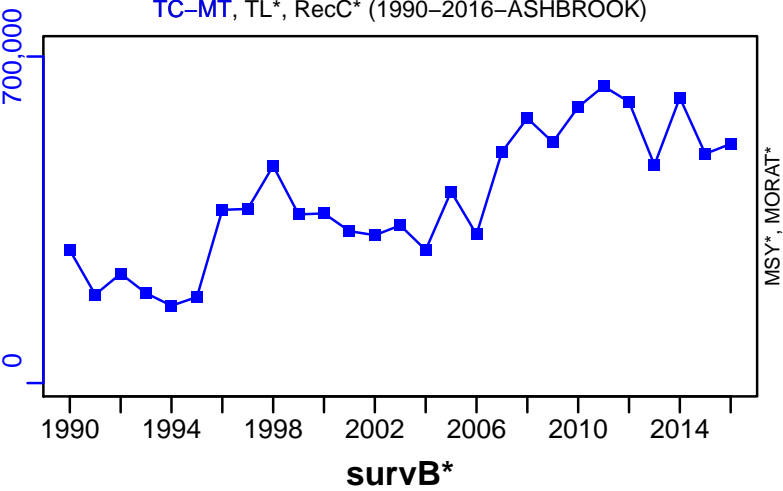


Recruits\*



Round sardinella North West Africa [RSARDNWA]

TC-MT, TL\*, RecC\* (1990-2016-ASHBROOK)



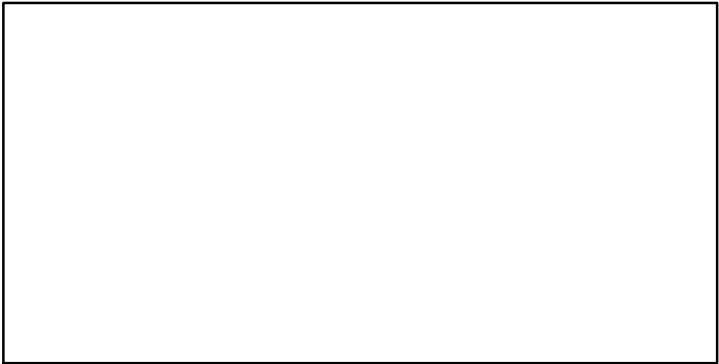
TAC\*, Cpair\*, Cadv\*



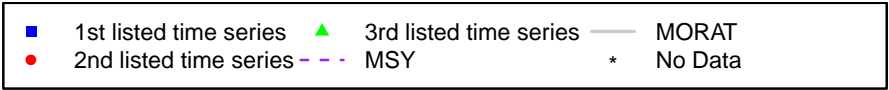
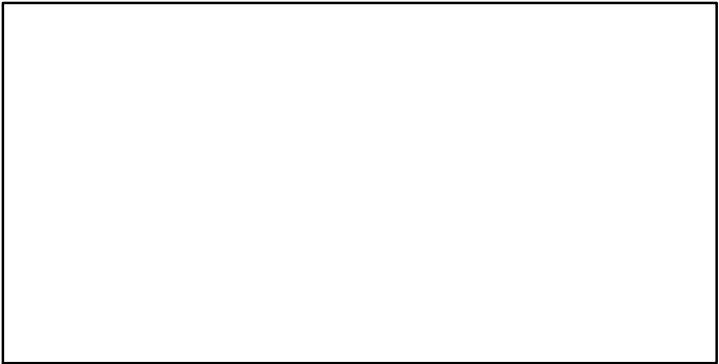
CPUE\*



EFFORT\*



CdivMSY\*



## Sardinella Central West Africa Gabon-Angola [SARDINCWAGAB-AGO]

Metadata	
<b>Scientific Name</b>	Sardinella spp
<b>Current Assess ID</b>	FAO-SPNWA-SARDINCWAGAB-AGO-1990-2017-ASHBROOK
<b>Area</b>	Central West Africa Gabon-Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	215,174		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	1.13		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

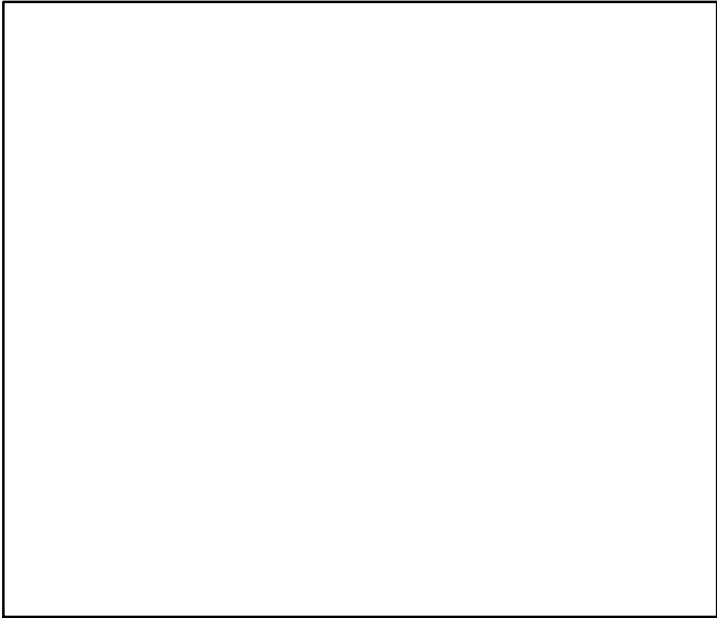
Kobe MSY\*



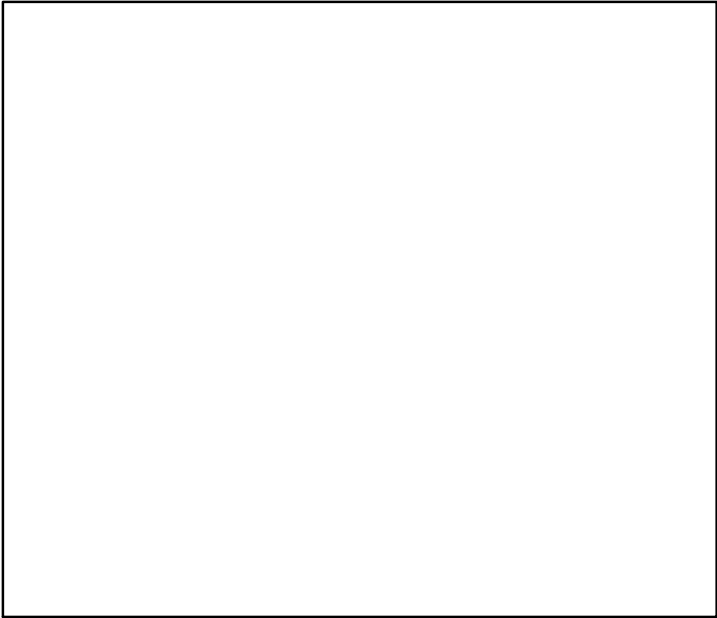
Kobe MGT\*



Spawner Recruit\*

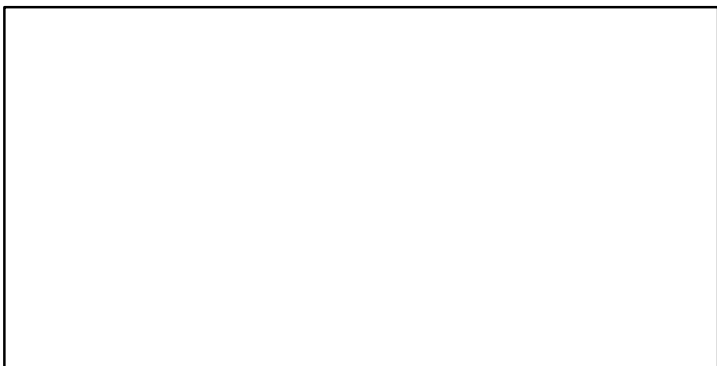


Production\*

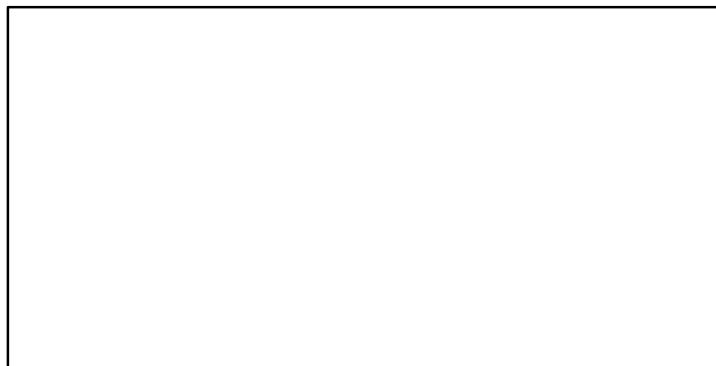


◆ Start Year   ◆ End Year   \* No Data

**TB\***



**SSB\***



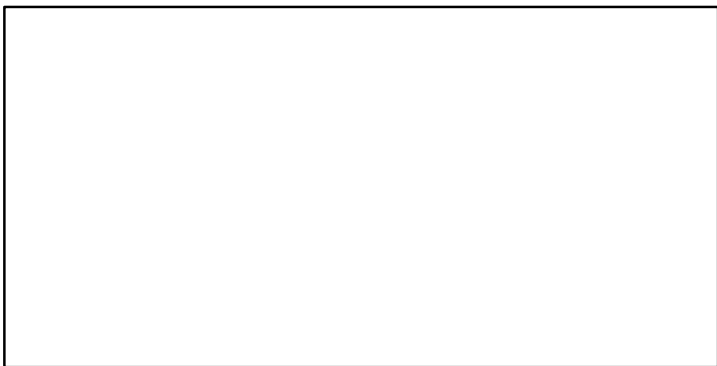
**TN \***



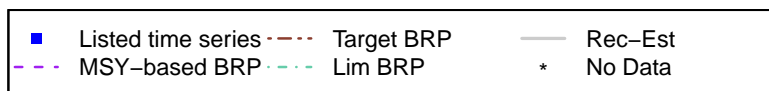
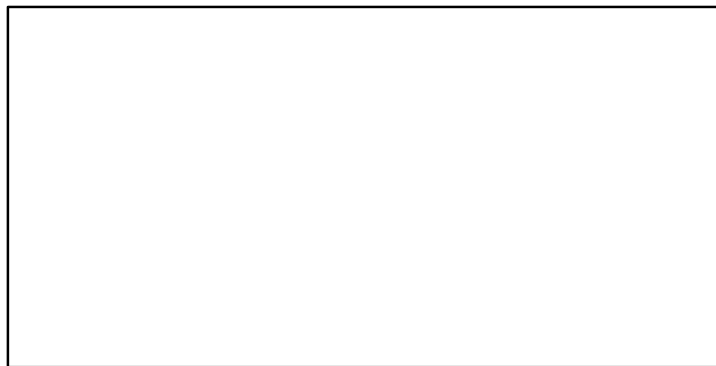
**F\***



**ER\***

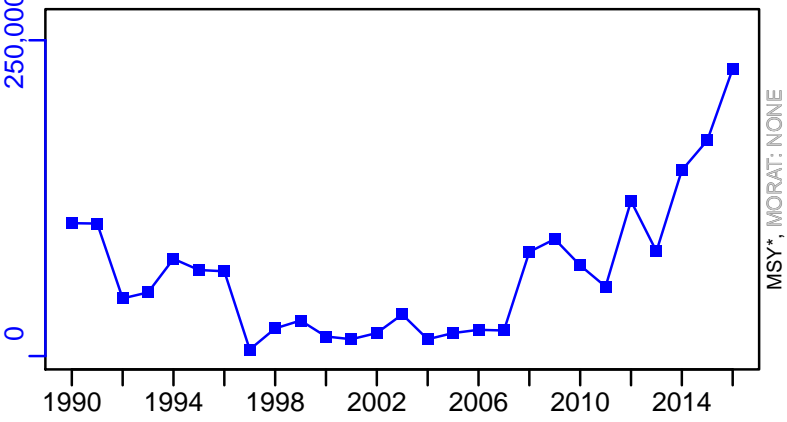


**Recruits\***



# Sardinella Central West Africa Gabon–Angola [SARDINCWAGAB–AGO]

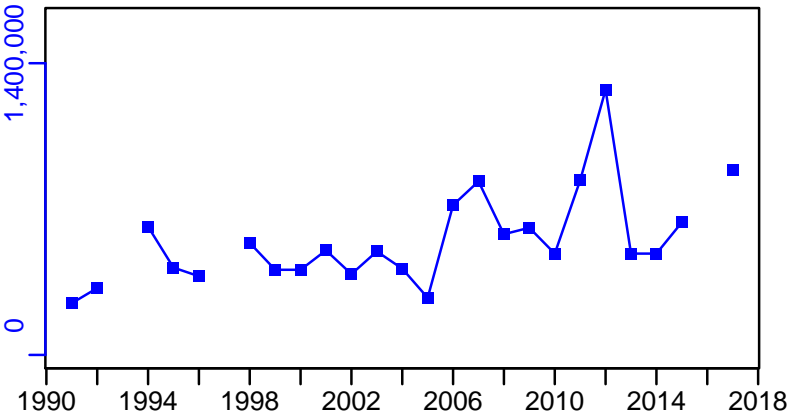
TC–MT, TL\*, RecC\* (1990–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_index–index (1990–2017–ASHBROOK)



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Sardinella Central West Africa Guinea Bissau-Liberia [SARDINCWAGNB-LBR]

Metadata	
<b>Scientific Name</b>	Sardinella spp
<b>Current Assess ID</b>	FAO-SPNWA-SARDINCWAGNB-LBR-1990-2017-ASHBROOK
<b>Area</b>	Central West Africa Guinea Bissau-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	60,047		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	0.37		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	1.29		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data



**TB\***



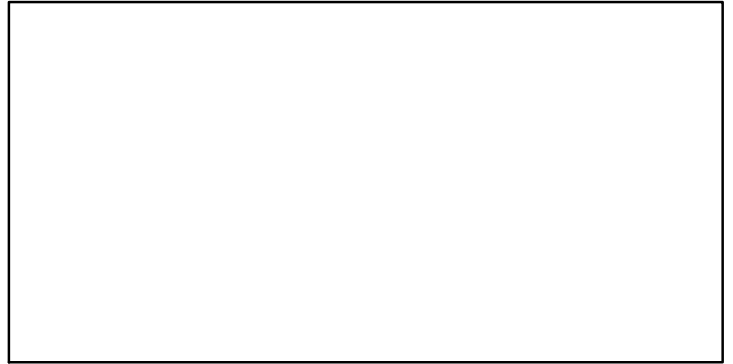
**SSB\***



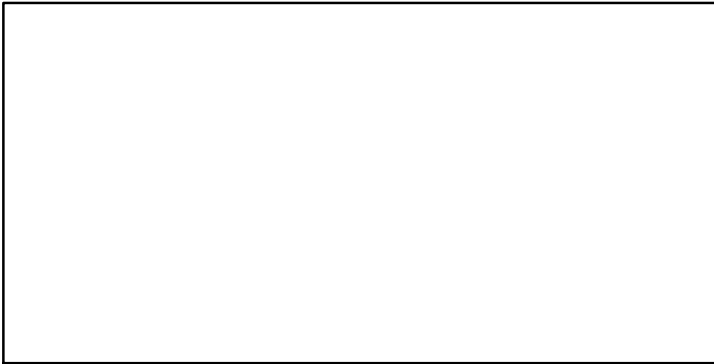
**TN \***



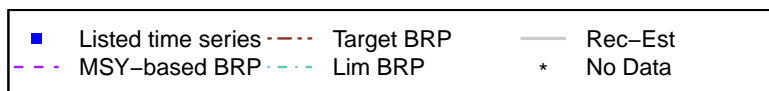
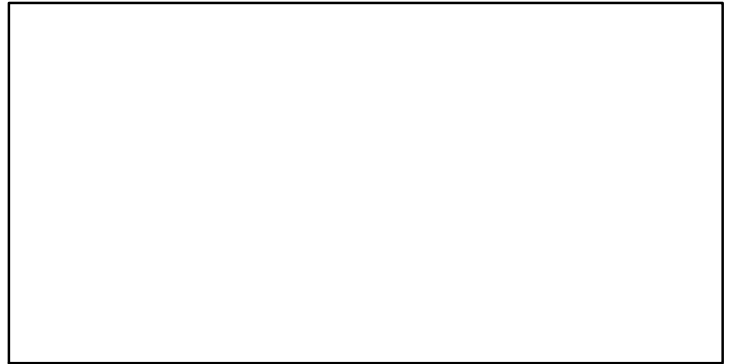
**F\***



**ER\***

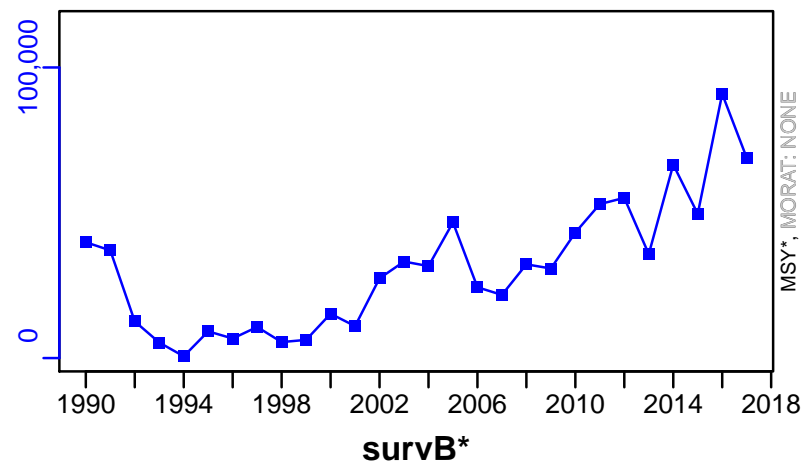


**Recruits\***



Sardinella Central West Africa Guinea Bissau–Liberia [SARDINCWAGNB–LBR]

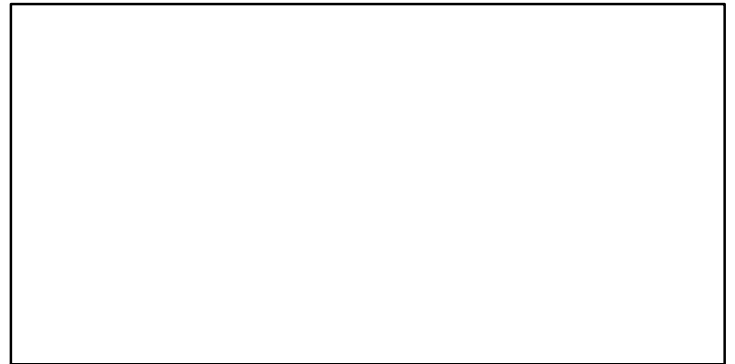
TC–MT, TL\*, RecC\* (1990–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Sardine North West Africa Zone A+B [SARDNWAZAB]

Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	FAO-SPNWA-SARDNWAZAB-1990-2016-ASHBROOK
<b>Area</b>	North West Africa Zone A+B
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2010, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	95,500	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2010	5.28	-	-
ER	ER-calc-ratio	2010	5.288	-	-
TC	TC-MT	2016	440,485		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



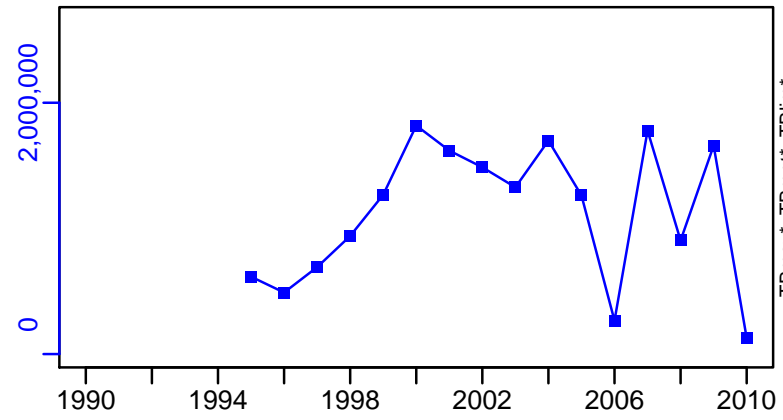
Production\*



◆ Start Year   ◆ End Year   \* No Data

# Sardine North West Africa Zone A+B [SARDNWAZAB]

TB-MT (1990-2010-CHING)



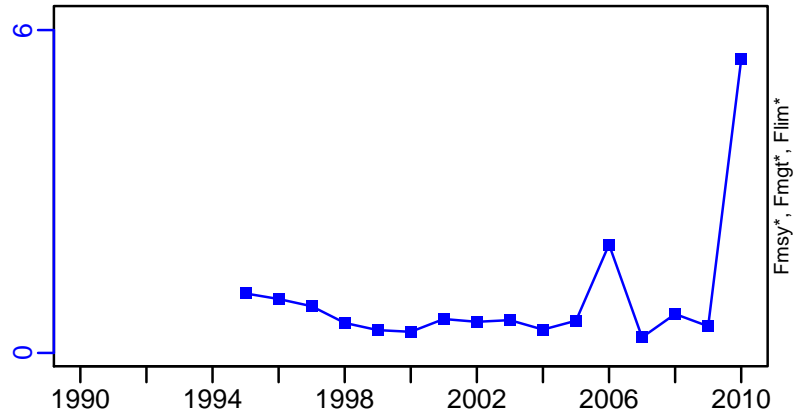
SSB\*



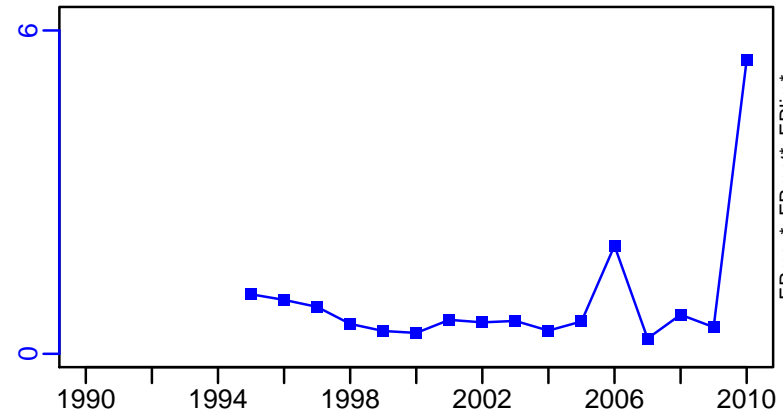
TN \*



F-1/yr (1990-2010-CHING)



ER-calc-ratio (1990-2010-CHING)



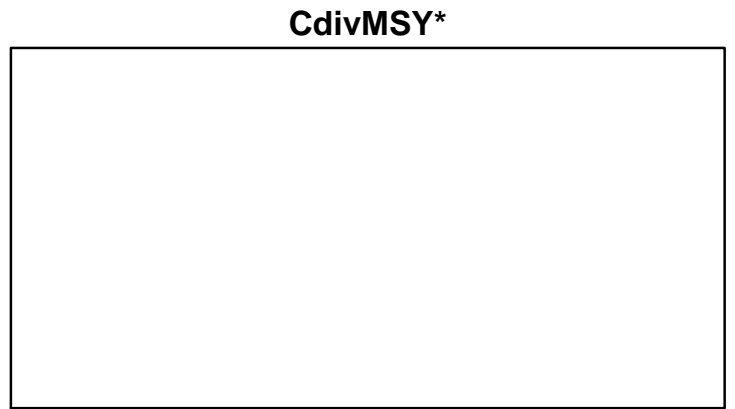
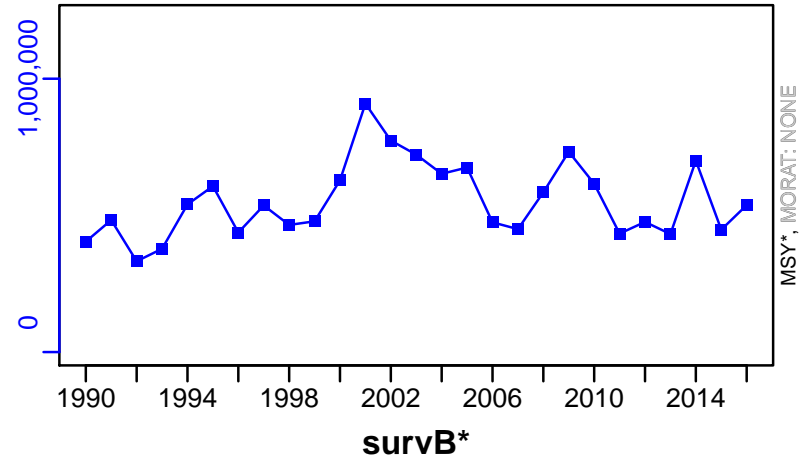
Recruits\*



# Sardine North West Africa Zone A+B [SARDNWAZAB]

TC-MT, TL\*, RecC\* (1990–2016–ASHBROOK)

TAC\*, Cpair\*, Cadv\*



## Sardine North West Africa Zone C [SARDNWAZC]

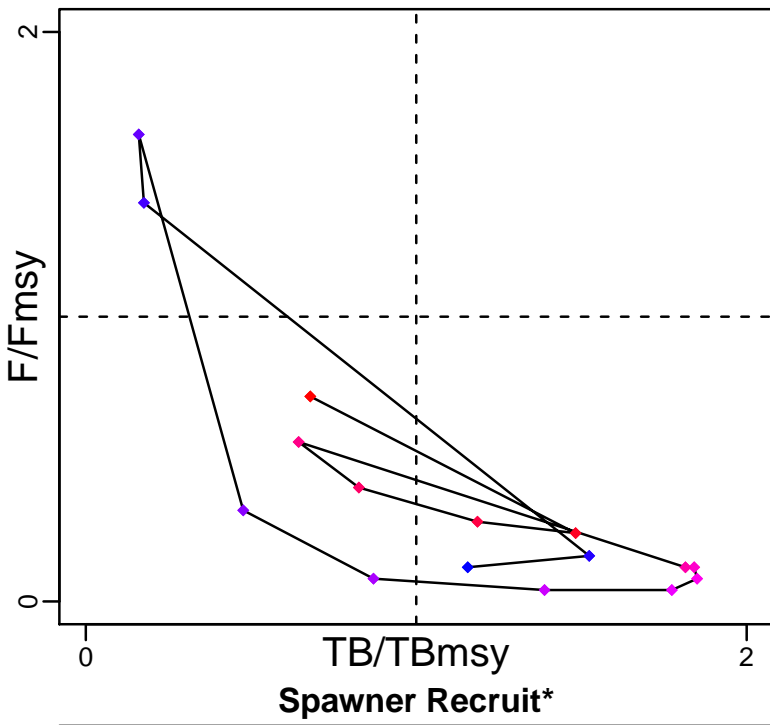
Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	FAO-SPNWA-SARDNWAZC-1990-2016-ASHBROOK
<b>Area</b>	North West Africa Zone C
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2010, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2010	3,400,129
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2010	0.25
<b>ERmsy</b>	ERmsy-est-ratio	2010	0.083
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2010	282,540
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	2,310,000	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2010	0.18	-	-
<b>ER</b>	ER-calc-ratio	2010	0.182	-	-
<b>TC</b>	TC-MT	2016	599,669		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2010	0.679		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	0.72		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2010	2.188		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

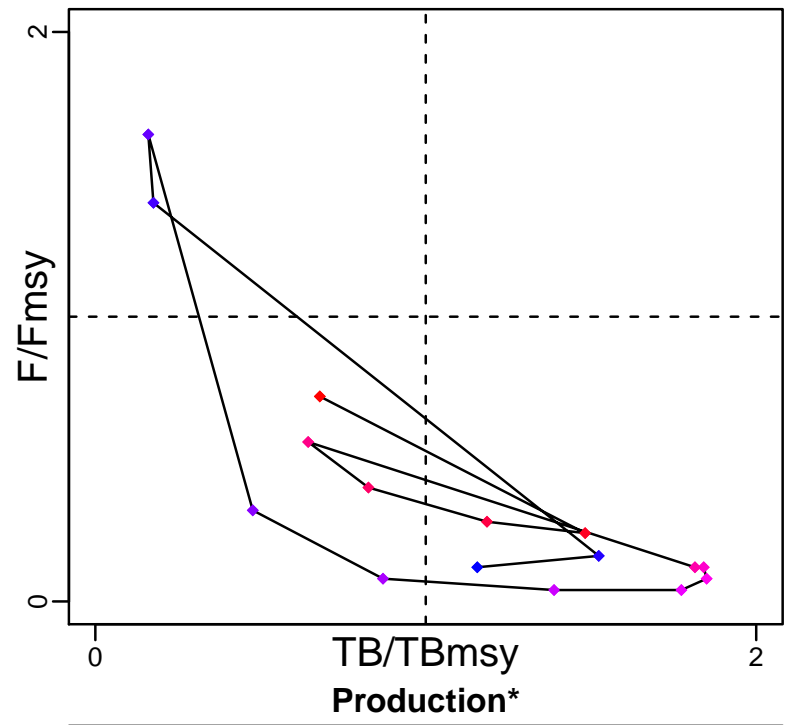
# Sardine North West Africa Zone C [SARDNWAZC]

Kobe MSYpref (1990–2010–CHING)



Spawner Recruit\*

Kobe MGTpref (1990–2010–CHING)



Production\*

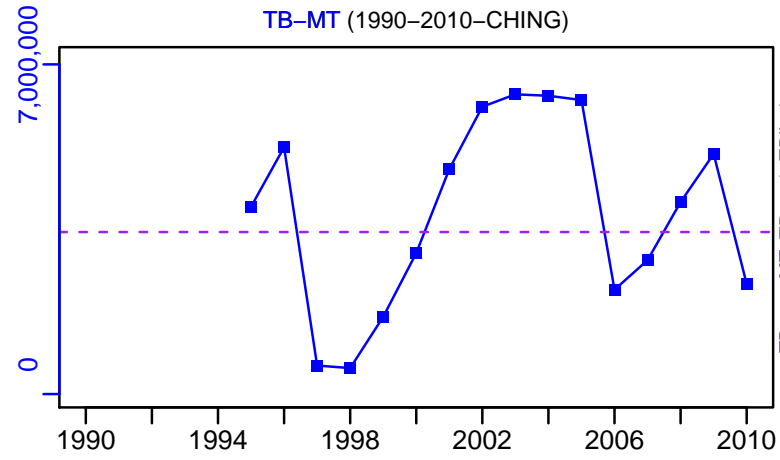
◆ Start Year ◆ End Year \* No Data



# Sardine North West Africa Zone C [SARDNWAZC]

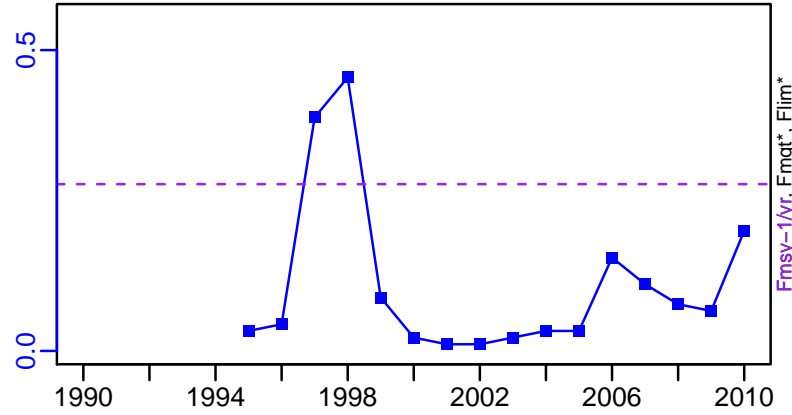
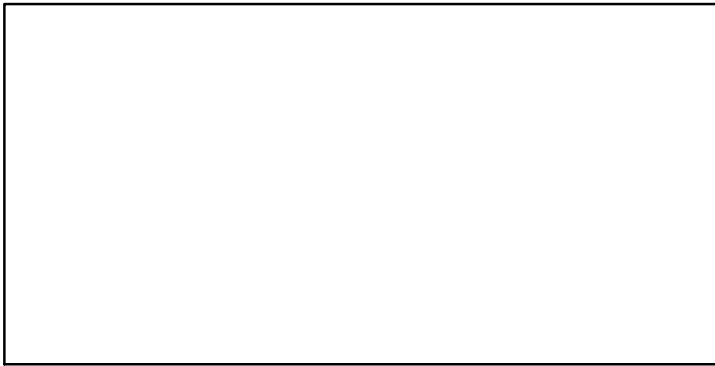
TB-MT (1990-2010-CHING)

SSB\*



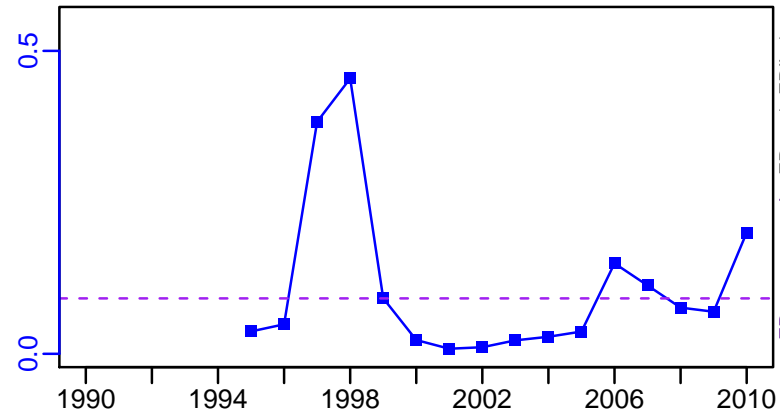
TN \*

F-1/yr (1990-2010-CHING)



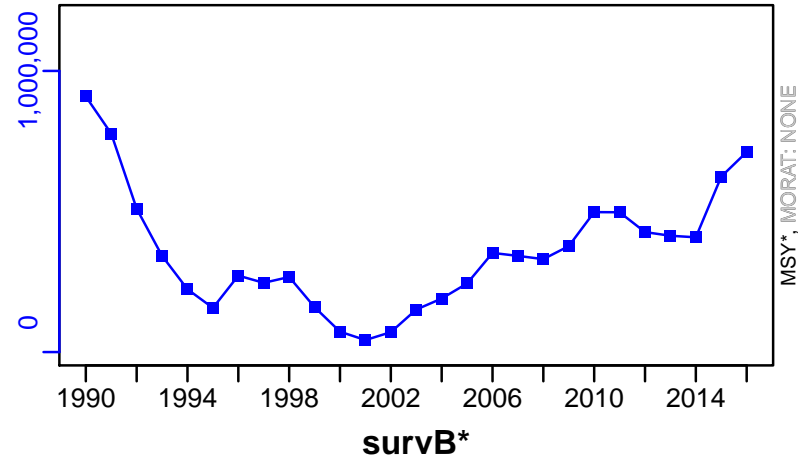
ER-calc-ratio (1990-2010-CHING)

Recruits\*



# Sardine North West Africa Zone C [SARDNWAZC]

TC-MT, TL\*, RecC\* (1990-2016-ASHBROOK)



TAC\*, Cpair\*, Cadv\*



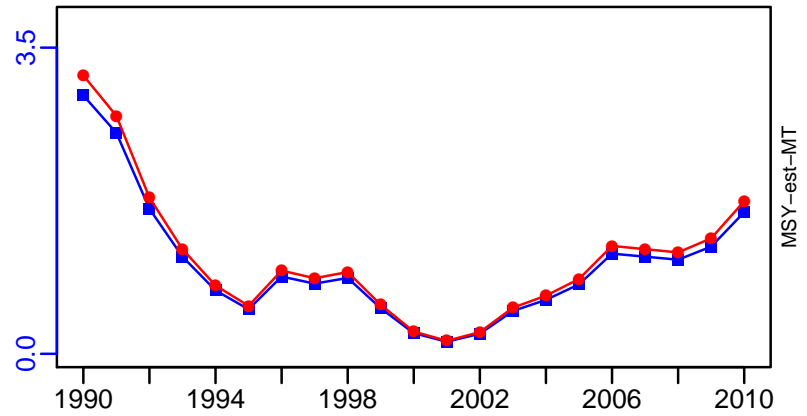
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1990-2010-CHING)



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Scad spp Central West Africa Guinea Bissau-Liberia [SCADSPPCWAGNB-LBR]

Metadata	
<b>Scientific Name</b>	Decapterus spp
<b>Current Assess ID</b>	FAO-SPNWA-SCADSPPCWAGNB-LBR-1994-2017-ASHBROOK
<b>Area</b>	Central West Africa Guinea Bissau-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
<b>Asmts in RAM</b>	2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	4796		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2017	0.86		
TB/TBmgt	TBdivTBmgt-dimensionless	2017	0.92		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

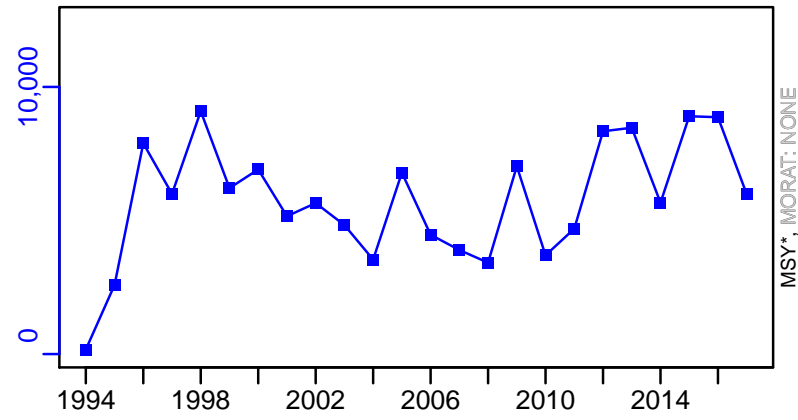


Recruits\*



# Scad spp Central West Africa Guinea Bissau–Liberia [SCADSPPCWAGNB–LBR]

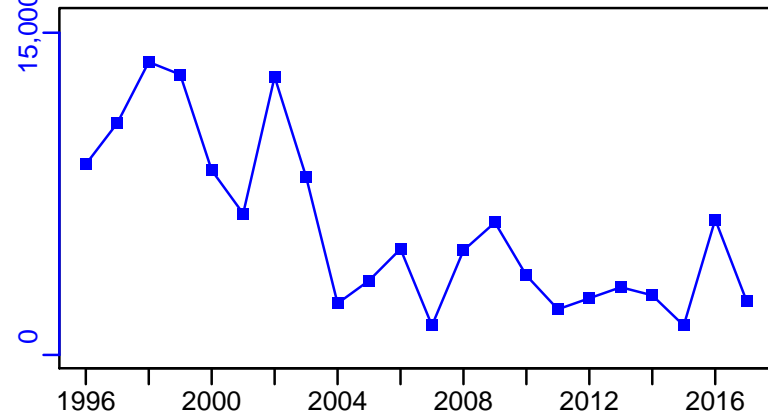
TC–MT, TL\*, RecC\* (1994–2017–ASHBROOK)



TAC\*, Cpair\*, Cadv\*



survB\_index–index (1994–2017–ASHBROOK)



CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

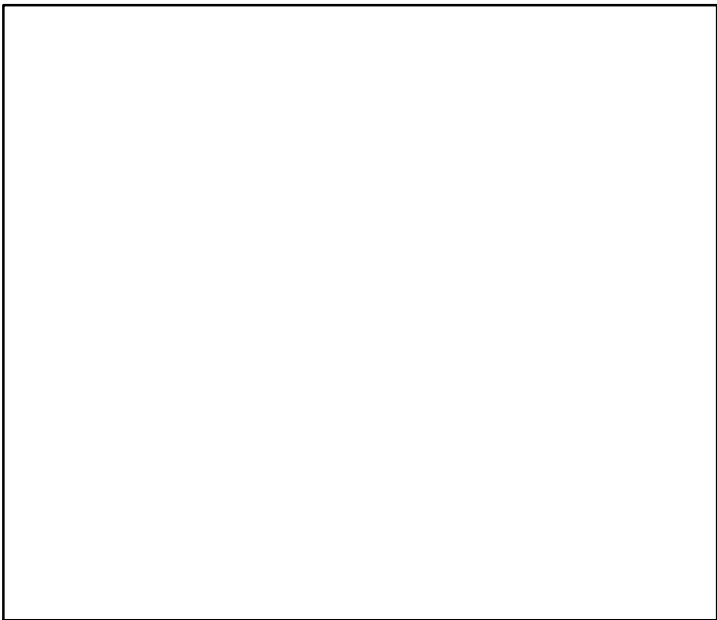
## Sole Central West Africa Angola [SOLECWAAGO]

Metadata	
<b>Scientific Name</b>	Cynoglossus spp
<b>Current Assess ID</b>	FAO-DR-SOLECWAAGO-1994-2010-ASHBROOK
<b>Area</b>	Central West Africa Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2010

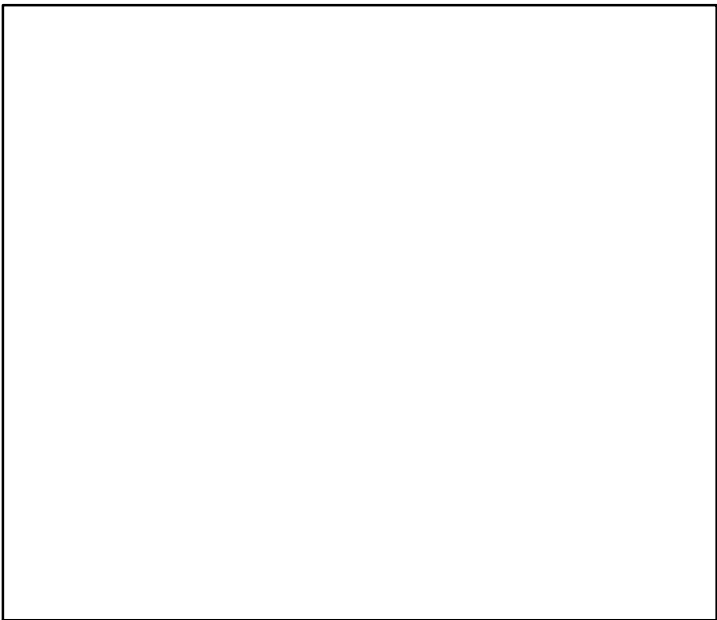
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2010	767		
TL	-	-	-		
TB/TBmsy	TBdivTBmsy-dimensionless	2010	0.74		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2010	1.72		
TB/TBmgt	TBdivTBmgt-dimensionless	2010	0.67		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

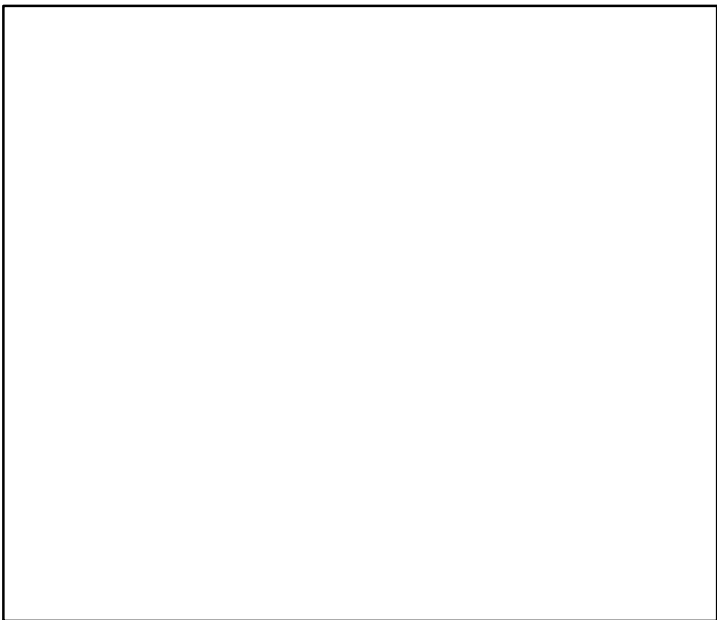
Kobe MSY\*



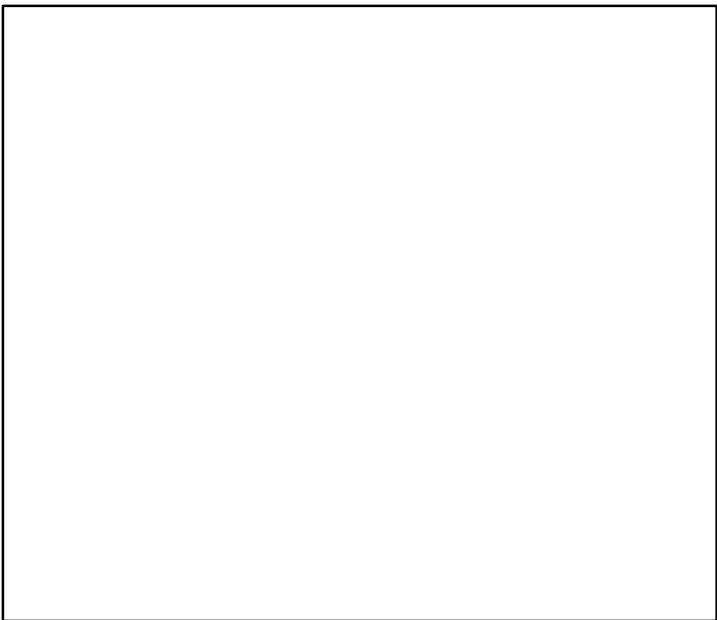
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data



TB\*



SSB\*



TN \*



F\*



ER\*

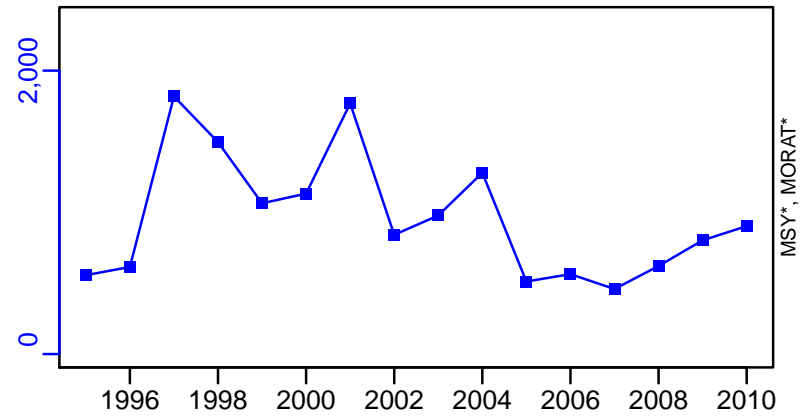


Recruits\*



# Sole Central West Africa Angola [SOLECWAAGO]

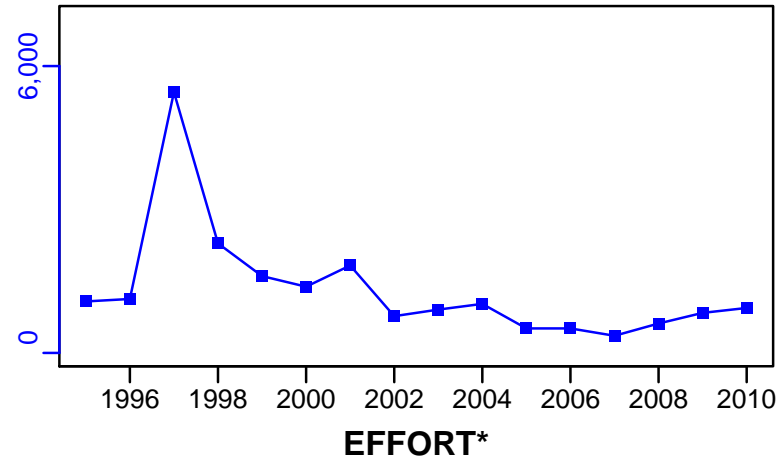
TC-MT, TL\*, RecC\* (1994-2010-ASHBROOK)



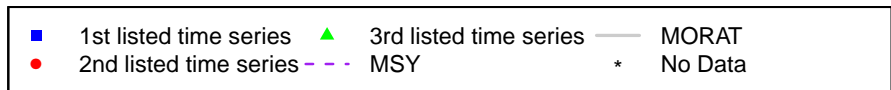
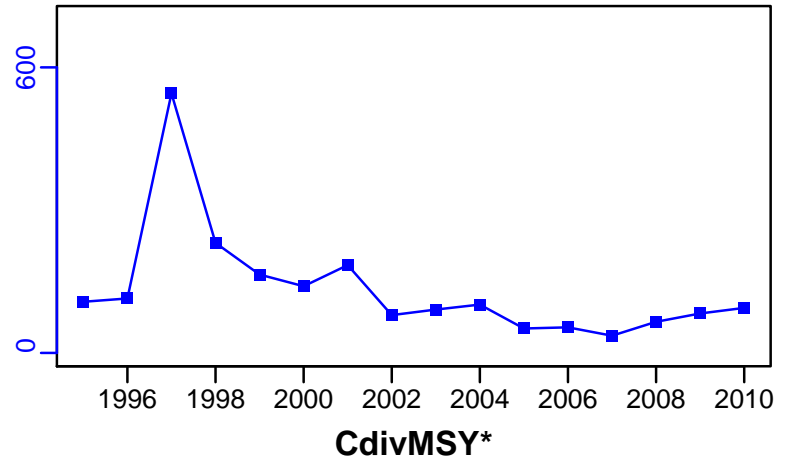
TAC\*, Cpair\*, Cadv\*



survB\_index-1-index (1994-2010-ASHBROOK)



CPUE-index (1994-2010-ASHBROOK)



## Sole Central West Africa Guinea Bissau-Guinea [SOLECWAGNB-GIN]

Metadata	
<b>Scientific Name</b>	Cynoglossus spp
<b>Current Assess ID</b>	FAO-DR-SOLECWAGNB-GIN-1994-2009-ASHBROOK
<b>Area</b>	Central West Africa Guinea Bissau-Guinea
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2009

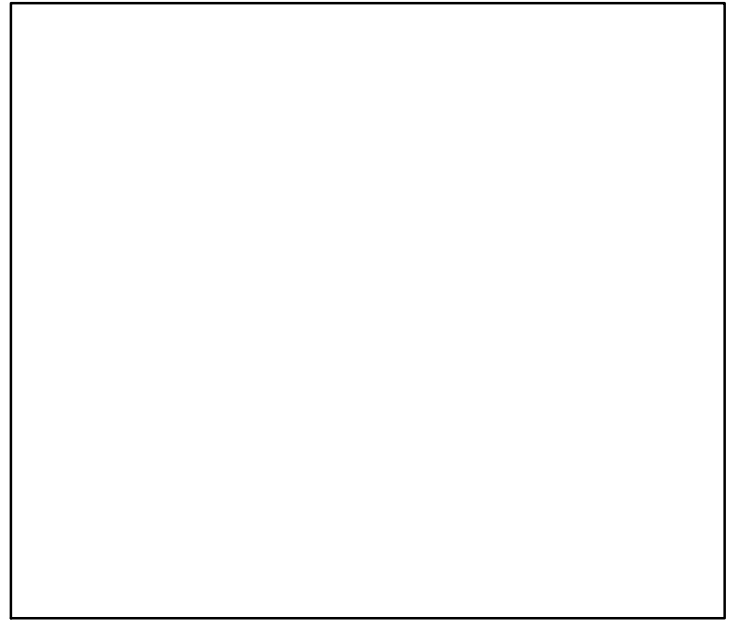
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2009	5349		
TL	-	-	-		
TB/TBmsy	TBdivTBmsy-dimensionless	2009	1.54		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2009	0.37		
TB/TBmgt	TBdivTBmgt-dimensionless	2009	1.4		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



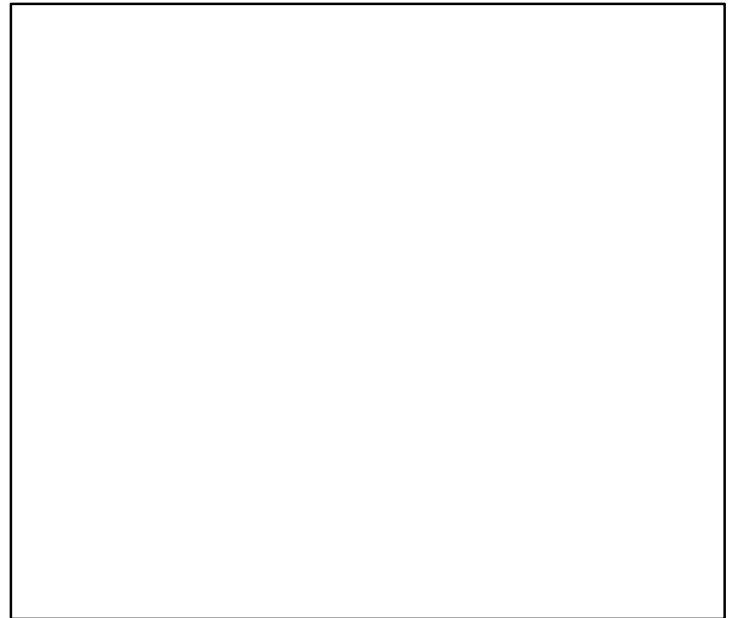
**Kobe MGT\***



**Spawner Recruit\***

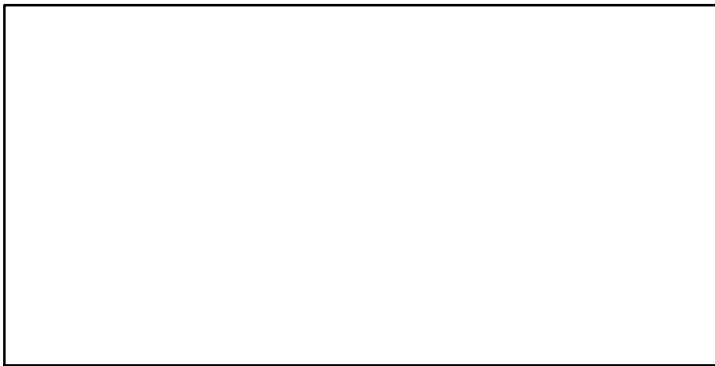


**Production\***

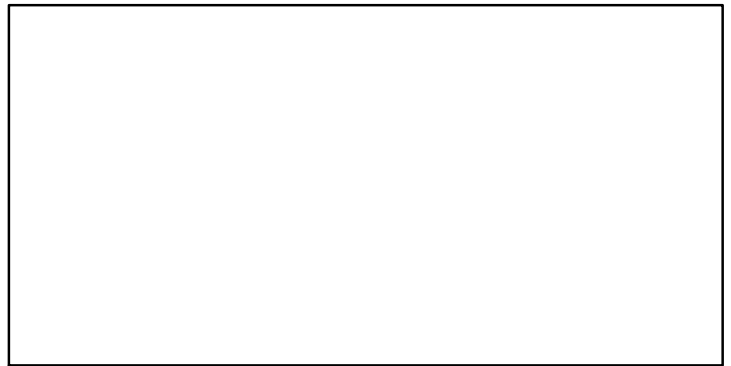


◆ Start Year ◆ End Year \* No Data

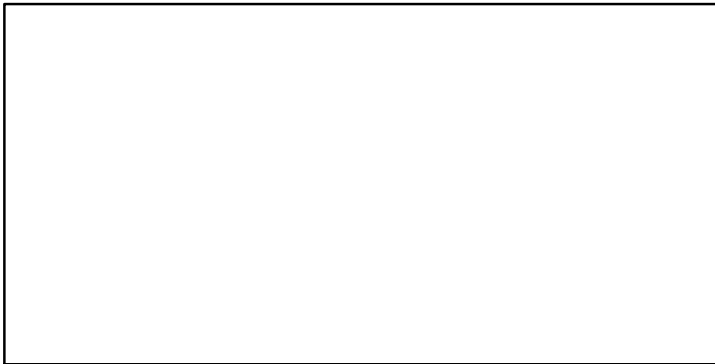
**TB\***



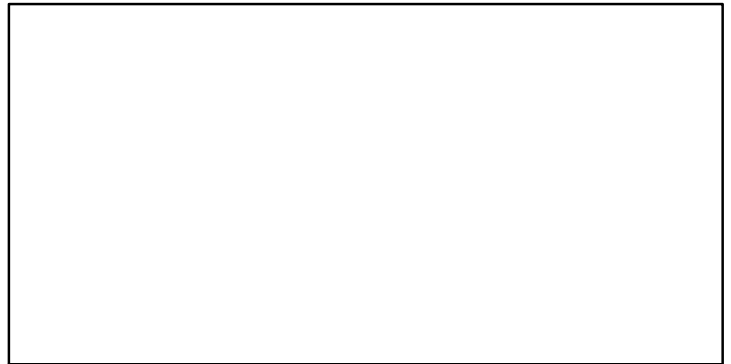
**SSB\***



**TN \***



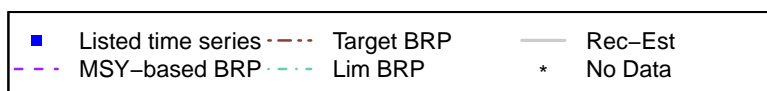
**F\***



**ER\***

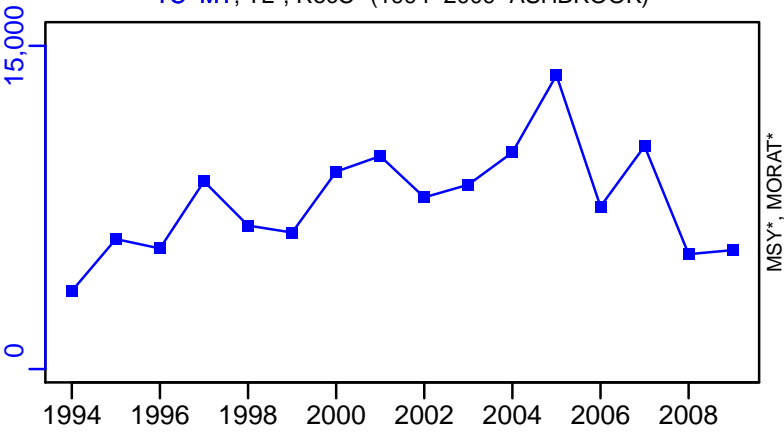


**Recruits\***



# Sole Central West Africa Guinea Bissau–Guinea [SOLECWAGNB–GIN]

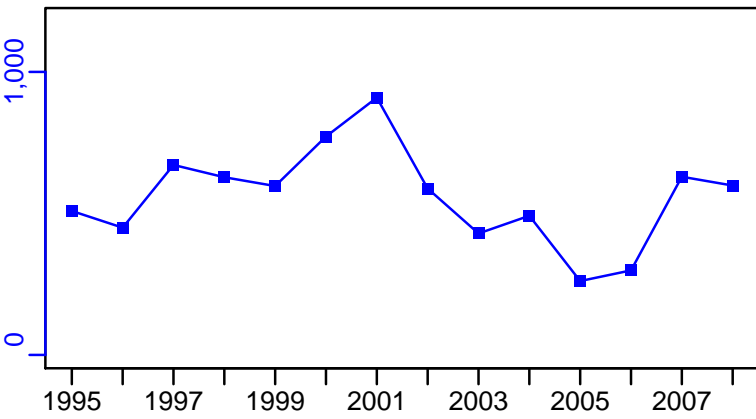
TC–MT, TL\*, RecC\* (1994–2009–ASHBROOK)



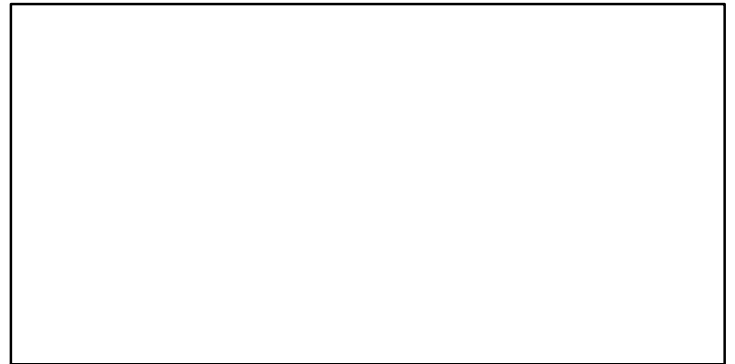
TAC\*, Cpair\*, Cadv\*



survB\_index–index (1994–2009–ASHBROOK)



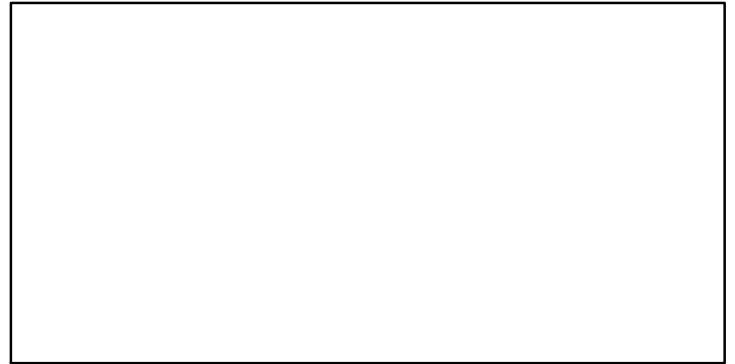
CPUE\*



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Southern pink shrimp Central West Africa [SPSHRIMPCWA]

Metadata	
<b>Scientific Name</b>	Farfantepenaeus notialis
<b>Current Assess ID</b>	FAO-DR-SPSHRIMPCWA-1990-2007-CHING
<b>Area</b>	Central West Africa
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	2250		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data



TB\*



SSB\*



TN \*



F\*



ER\*



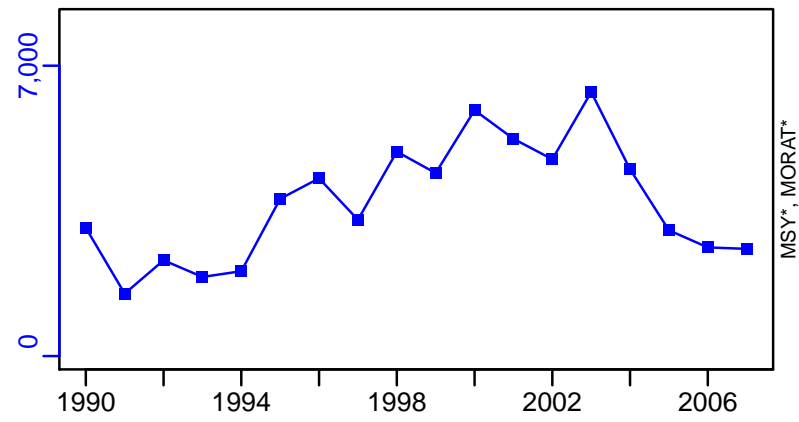
Recruits\*



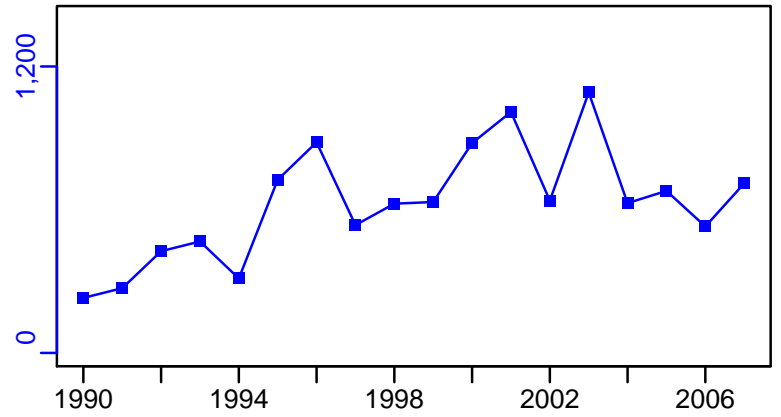
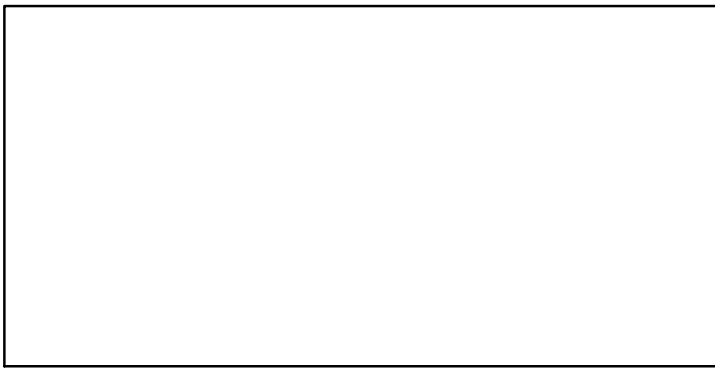
# Southern pink shrimp Central West Africa [SPSHRIMPCWA]

TC-MT, TL\*, RecC\* (1990-2007-CHING)

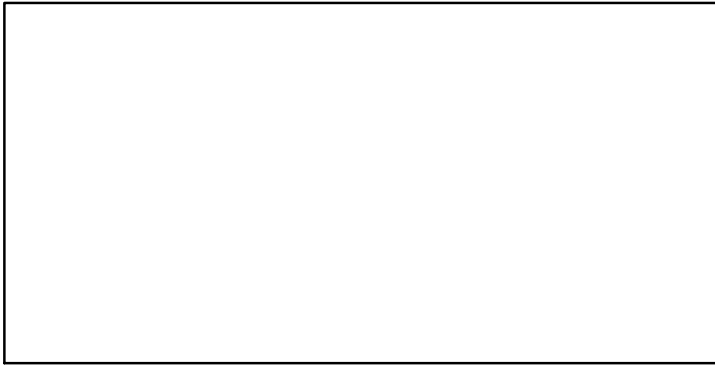
TAC\*, Cpair\*, Cadv\*



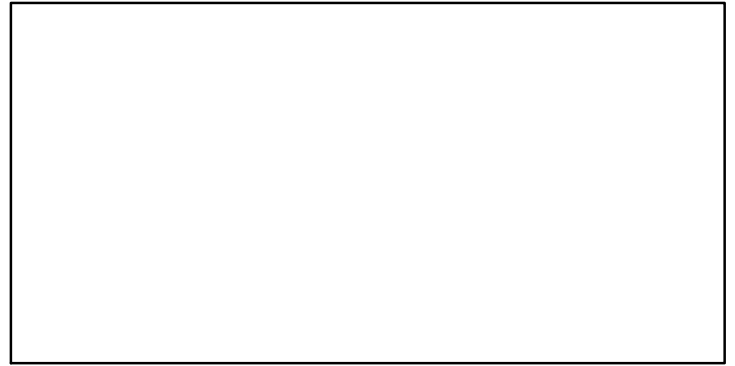
CPUE-kg/day (1990-2007-CHING)



EFFORT\*



CdivMSY\*



## Threadfin Central West Africa Cote Divoire-Benin [THREADCWACIV-BEN]

Metadata	
<b>Scientific Name</b>	Galeoides decadactylus
<b>Current Assess ID</b>	FAO-DR-THREADCWACIV-BEN-1990-2006-CHING
<b>Area</b>	Central West Africa Cote Divoire-Benin
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2006

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2006	15	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2006	3980		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



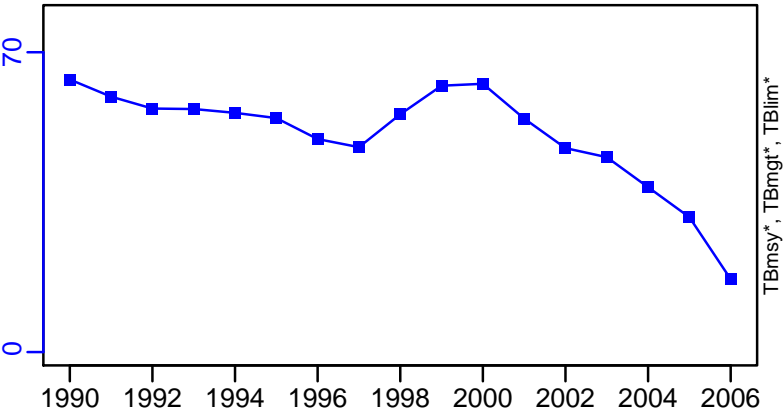
Production\*



◆ Start Year   ◆ End Year   \* No Data

Threadfin Central West Africa Cote Divoire–Benin [THREADCWACIV–BEN]

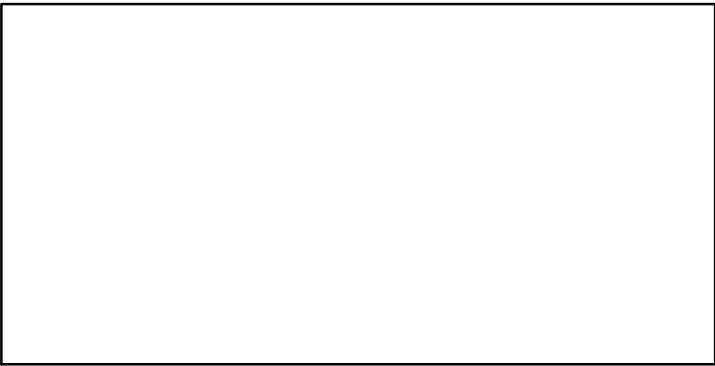
TB–index (1990–2006–CHING)



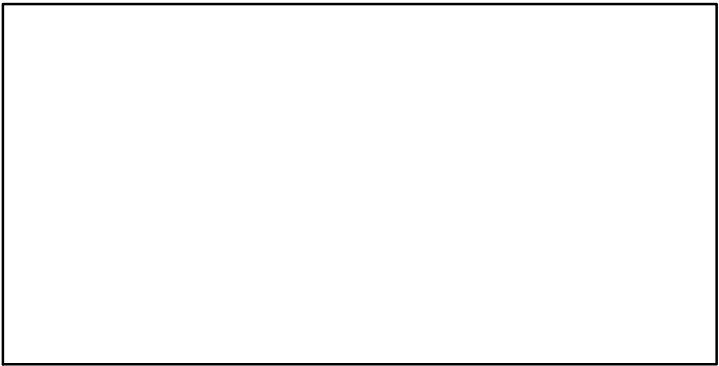
SSB\*



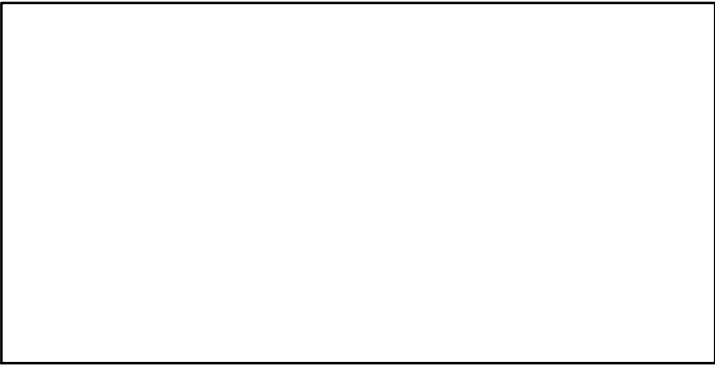
TN \*



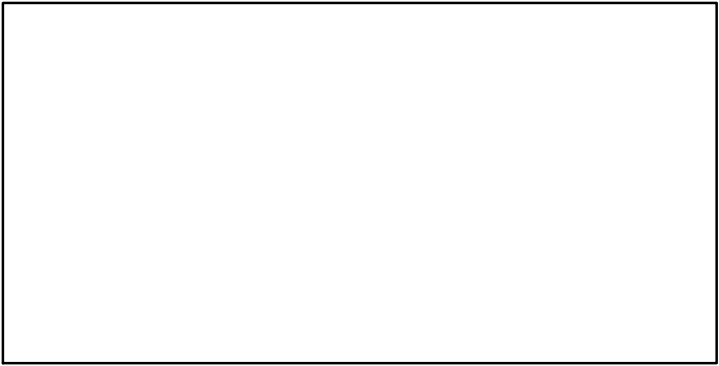
F\*



ER\*

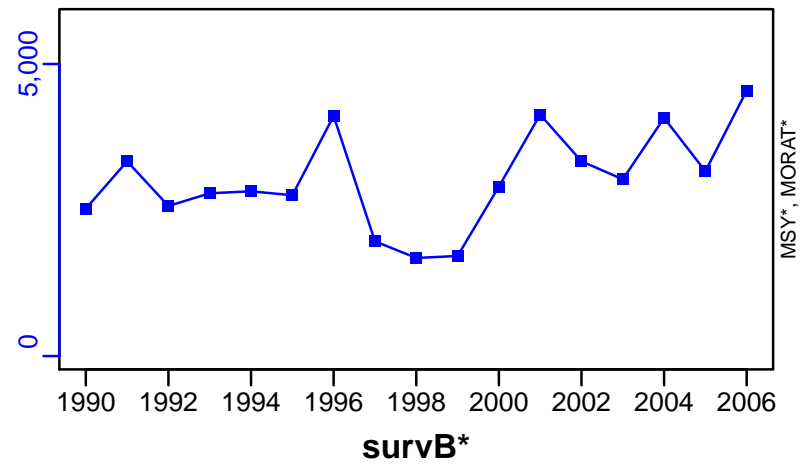


Recruits\*



# Threadfin Central West Africa Cote Divoire–Benin [THREADCWACIV–BEN]

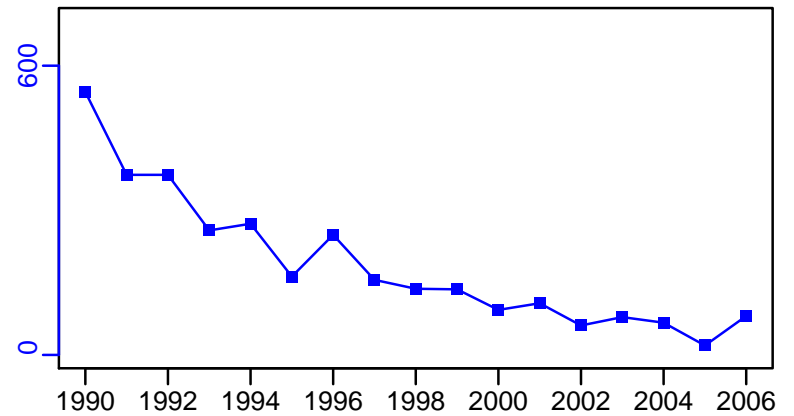
TC–MT, TL\*, RecC\* (1990–2006–CHING)



TAC\*, Cpair\*, Cadv\*



CPUE–kg/day (1990–2006–CHING)



EFFORT\*



CdivMSY\*



■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Threadfin Central West Africa Gabon-Angola [THREADCWAGAB-AGO]

Metadata	
<b>Scientific Name</b>	Galeoides decadactylus
<b>Current Assess ID</b>	FAO-DR-THREADCWAGAB-AGO-1990-2007-CHING
<b>Area</b>	Central West Africa Gabon-Angola
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2007	54	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	1940		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

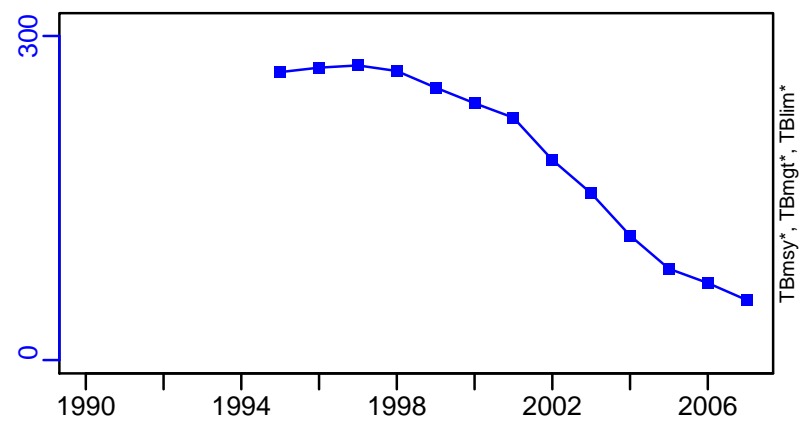


◆ Start Year   ◆ End Year   \* No Data



# Threadfin Central West Africa Gabon–Angola [THREADCWAGAB–AGO]

TB-index (1990–2007–CHING)



SSB\*



TN \*



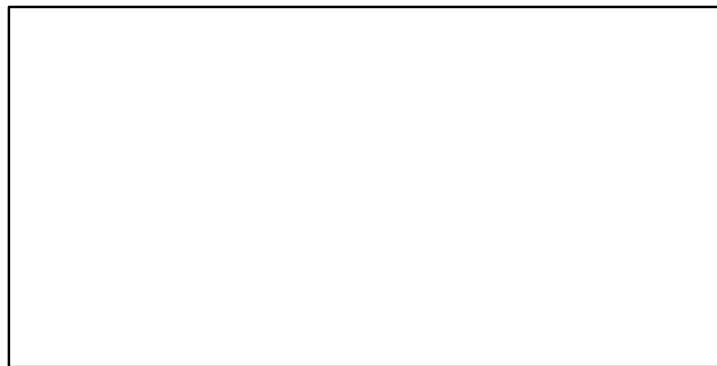
F\*



ER\*



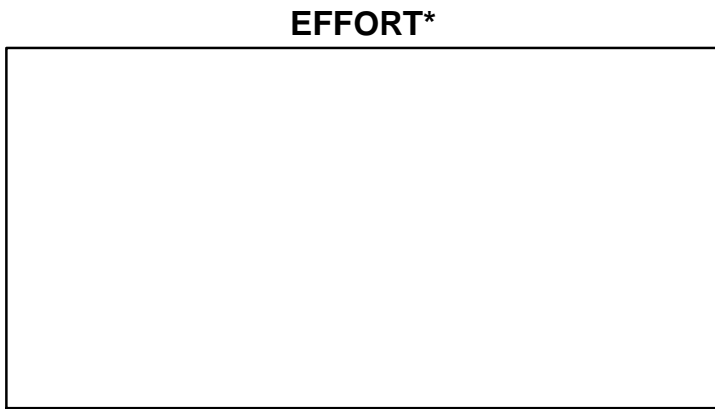
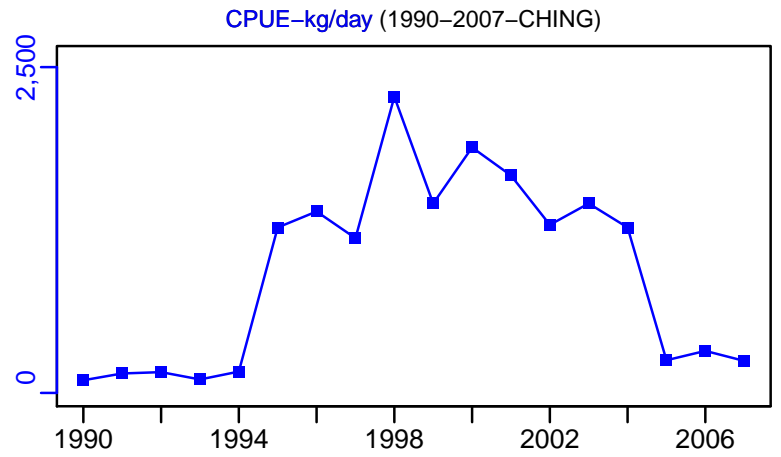
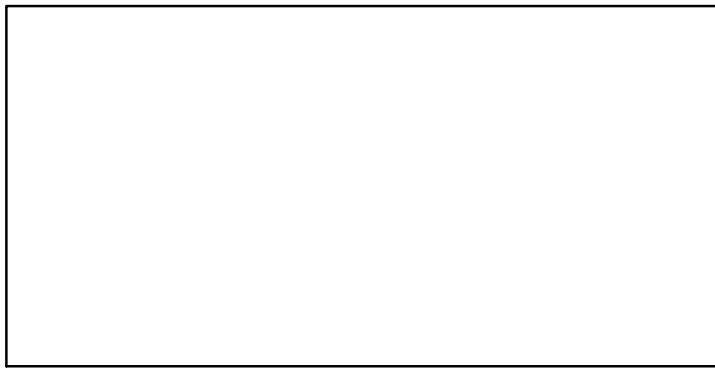
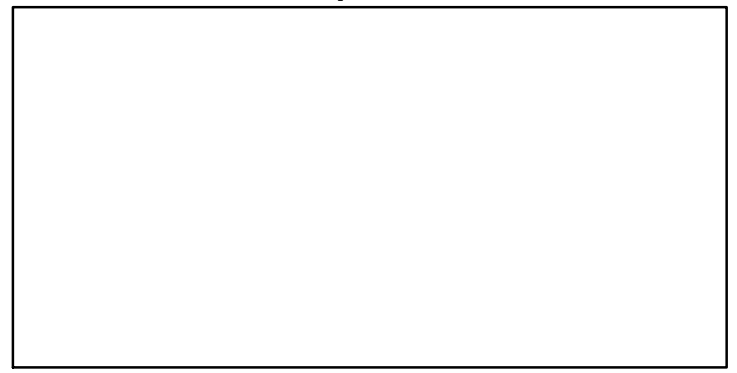
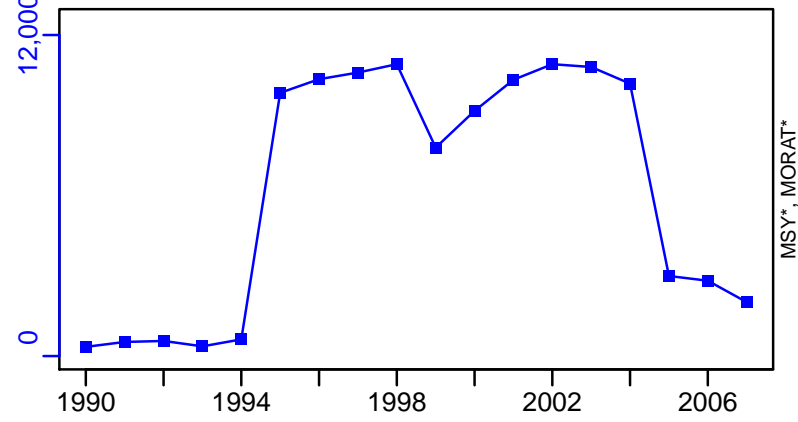
Recruits\*



# Threadfin Central West Africa Gabon–Angola [THREADCWAGAB–AGO]

TC–MT, TL\*, RecC\* (1990–2007–CHING)

TAC\*, Cpair\*, Cadv\*



## Threadfin Central West Africa Guinea-Liberia [THREADCWAGIN-LBR]

Metadata	
<b>Scientific Name</b>	Galeoides decadactylus
<b>Current Assess ID</b>	FAO-DR-THREADCWAGIN-LBR-1994-2007-CHING
<b>Area</b>	Central West Africa Guinea-Liberia
<b>Management Authority</b>	Food and Agriculture Organization of the United Nations
<b>Assessor</b>	FAO/CECAF Working Group on the Assessment of Demersal Resources
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2007	4200		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***

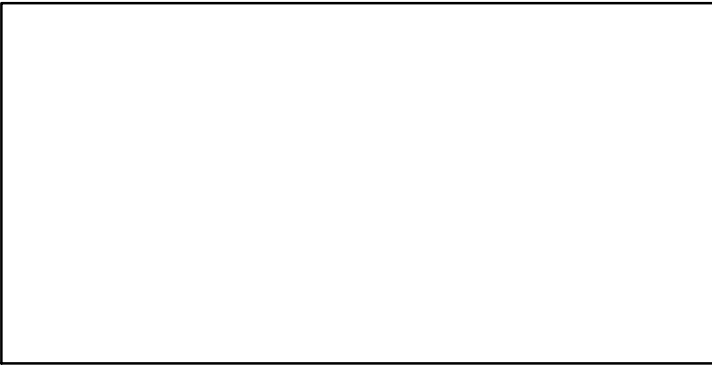


**Production\***



◆ Start Year ◆ End Year \* No Data

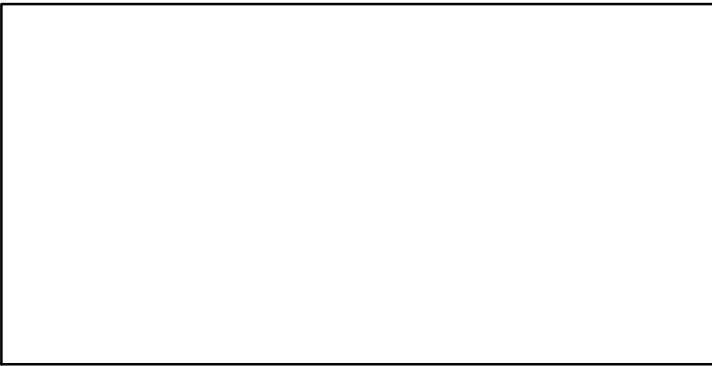
**TB\***



**SSB\***



**TN \***



**F\***



**ER\***

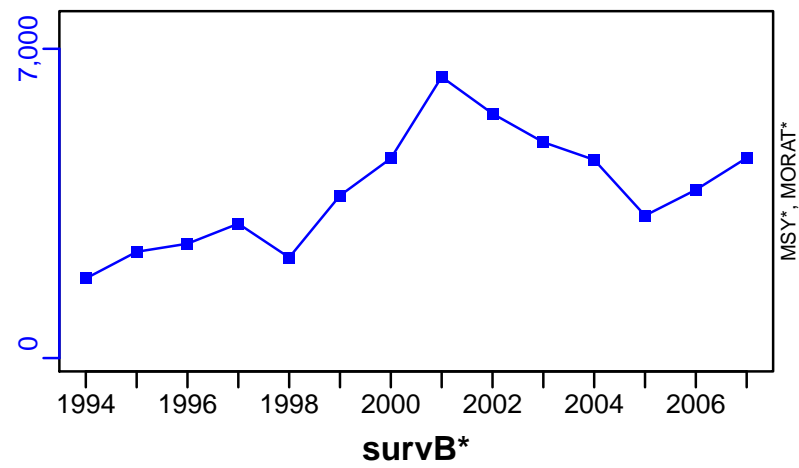


**Recruits\***



# Threadfin Central West Africa Guinea-Liberia [THREADCWAGIN-LBR]

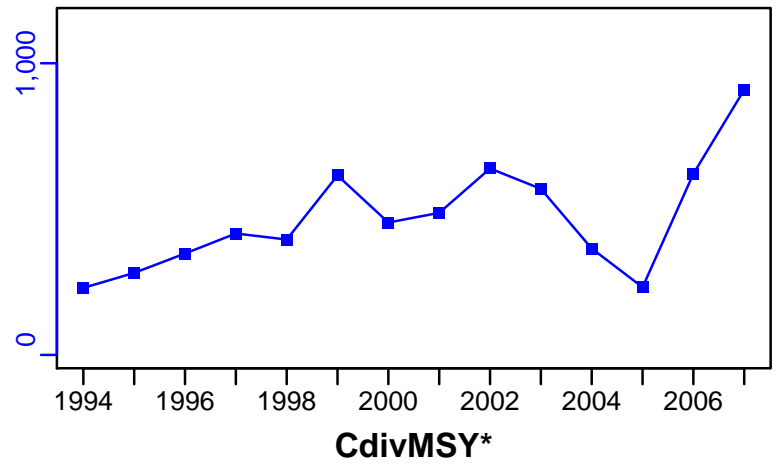
TC-MT, TL\*, RecC\* (1994-2007-CHING)



TAC\*, Cpair\*, Cadv\*



CPUE-kg/day (1994-2007-CHING)



EFFORT\*



CdivMSY\*

