# **Canada East Coast Stocks**

v4.61 (Apr-02-2023)

Not present Present Preferred

		Time Ser	ies Types	
Stock	B/Bmsy	U/Umsy	B/Bmgt	U/Umgt
1. ACADRED2J3K [Acadian redfish NAFO Division 2J3K]	TB SSB	ER F	TB SSB	ER F
2. ACADREDUT3 [Acadian redfish Unit 3]	TB SSB	ER F	TB SSB	ER F
3. AMPL23K [American plaice Labrador - NE Newfoundland]	TB SSB	ER F	TB SSB	ER F
4. AMPL3LNO [American plaice Grand Banks]	TB SSB	ER F	TB SSB	ER F
5. AMPL3M [American plaice Flemish Cap]	TB SSB	ER F	TB SSB	ER F
6. AMPL3Ps [American plaice St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
7. AMPL4T [American plaice Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
8. AMPL4VWX [American plaice Scotian Shelf and Bay of Fundy]	TB SSB	ER F	TB SSB	ER F
ARCSURF4RST [Arctic surfclam Quebec and Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
10. ARCSURFBANQ [Arctic surfclam Banquereau]	TB SSB	ER F	TB SSB	ER F
11. ARCSURFGB [Arctic surfclam Division 3LNO]	TB SSB	ER F	TB SSB	ER F
12. ARCSURFQCW [Arctic surfclam Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
13. ATHAL3NOPs4VWX5Zc [Atlantic halibut Scotian Shelf and Southern	TB SSB	ER F	TB SSB	ER F
Grand Banks]				
14. ATHAL4RST [Atlantic halibut Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
15. BSKATCANATL [Barndoor skate Canadian Atlantic Ocean]	TB SSB	ER F	TB SSB	ER F
16. CAPE2J3KL [Capelin Southern Labrador-Eastern Newfoundland]	TB SSB	ER F	TB SSB	ER F
17. CAPE4RST [Capelin Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
18. COD1ABCDE [Atlantic cod NAFO 1ABCDE]	TB SSB	ER F	TB SSB	ER F
19. COD1IN [Atlantic cod NAFO Subarea 1 (inshore)]	TB SSB	ER F	TB SSB	ER F
20. COD2J3KL [Atlantic cod Southern Labrador-Eastern Newfoundland]	TB SSB	ER F	TB SSB	ER F
21. COD3M [Atlantic cod Flemish Cap]	TB SSB	ER F	TB SSB	ER F
22. COD3NO [Atlantic cod Southern Grand Banks]	TB SSB	ER F	TB SSB	ER F
23. COD3Pn4RS [Atlantic cod Northern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
24. COD3Ps [Atlantic cod St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
25. COD4TVn [Atlantic cod Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
26. COD4VsW [Atlantic cod Eastern Scotian Shelf]	TB SSB	ER F	TB SSB	ER F
27. COD4X5Yb [Atlantic cod Western Scotian Shelf, Bay of Fundy and	TB SSB	ER F	TB SSB	ER F
Gulf of Maine]				
28. COD5Zjm [Atlantic cod NAFO 5Zjm]	TB SSB	ER F	TB SSB	ER F
29. CUSK4X [Cusk Western Scotian Shelf]	TB SSB	ER F	TB SSB	ER F
30. GHAL01ABCDEF [Greenland halibut NAFO divisions 01ABCDEF]	TB SSB	ER F	TB SSB	ER F
31. GHAL23KLMNO [Greenland halibut Labrador Shelf - Grand Banks]	TB SSB	ER F	TB SSB	ER F
32. GHAL4RST [Greenland halibut Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
33. GURCH4RST [Green sea urchin Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
34. HAD3LNO [Haddock Grand Banks]	TB SSB	ER F	TB SSB	ER F
35. HAD3Ps [Haddock St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
36. HAD4X5Y [Haddock Western Scotian Shelf, Bay of Fundy and Gulf	TB SSB	ER F	TB SSB	ER F
of Maine]				

37. HERRARFA [Herring NAFO division 4R (Spring spawners)]
39. HERR4SFS [Herring Quebec North Shore (Fall spawners)] 40. HERR4SSS [Herring Quebec North Shore (Spring spawners)] 41. HERR4TFA [Herring Southern Gulf of St. Lawrence (Fall spawners)] 42. HERR4TFA [Herring Southern Gulf of St. Lawrence (Spring spawners)] 43. HERR4TFA [Herring Southern Gulf of St. Lawrence (Spring spawners)] 44. HERRHTSP [Herring Scotian Shelf and Bay of Fundy] 45. HERR4VWX [Herring Scotian Shelf and Bay of Fundy] 46. HERRHVELDESC [Herring Newfoundland East and South Coast] 47. HERRHVELDESC [Herring Newfoundland East and South Coast] 48. HERRHVELDESC [Herring Newfoundland East and South Coast] 49. LISCALL3Ps [Iceland scallop St. Pierre Bank] 40. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticosti Island (LFA 15-18)] 47. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)] 48. LOBSTERLFA19-21 [American lobster Magdalen Islands (LFA 22)] 49. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)] 49. LOBSTERLFA23 [American lobster Atlantic Coast of Nova Scotia (TB SSB ER F TB S
40. HERR4SSS [Herring Quebec North Shore (Spring spawners)] 41. HERR4TFA [Herring Southern Gulf of St. Lawrence (Fall spawners)] 42. HERR4TSP [Herring Southern Gulf of St. Lawrence (Spring spawners)] 43. HERR4VWX [Herring Scotian Shelf and Bay of Fundy] 43. HERR4VWX [Herring Scotian Shelf and Bay of Fundy] 44. HERRNFLDESC [Herring Newfoundland East and South Coast] 45. ILSCALL3Ps [Iceland scallop St. Pierre Bank] 46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Antost 18 SSB ER F TB SSB ER F 46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Antost 18 SSB ER F TB SSB ER F 46. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)] 47. LOBSTERLFA2] [American lobster Magdalen Islands (LFA 22)] 48. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)] 49. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)] 50. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. TB SSB ER F TB SSB ER F 48. LOBSTERLFA23-33 [American lobster Atlantic Coast of Nova Scotia TB SSB ER F TB SSB ER F 49. LOBSTERLFA23-34 [American lobster Lobster Fishing Area 3-14] 50. LOBSTERLFA23-14 [American lobster Lobster Fishing Area 3-14] 51. LOBSTERLFA23-14 [American lobster Lobster Fishing Area 3-14] 52. LOBSTERLFA35-38 [American lobster Lobster Fishing Area 3-14] 53. LOBSTERLFA35-38 [American lobster Lobster Fishing Area 3-14] 54. LOBSTERLFA41 [American lobster Lobster Fishing Area 3-14] 55. LUMP3PAHS [Lumpfish Northern Gulf of St. Lawrence] 56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas TB SSB ER F TB SSB ER F 56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas TB SSB ER F TB SSB ER F 56. OFSCIQCUS [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F 56. OFSCIQCUS [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F 56. PANDALNUN [Northern shrimp Shrimp Fishing Area 10] 57. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 10] 58. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 3] 59. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 5] 59. PANDAL
41. HERRATFA [Herring Southern Gulf of St. Lawrence (Fall spawners)]   42. HERRATSP [Herring Southern Gulf of St. Lawrence (Spring spawners)]   43. HERRAYWX [Herring Scotian Shelf and Bay of Fundy]   44. HERRNFLDESC [Herring Newfoundland East and South Coast]   45. LSCALL3Ps [Iceland scallop St. Pierre Bank]   46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticost Island (LFA 15-18)]   47. LOBSTERLFA15-18 [American lobster Gaspe (LFA 19-21)]   48. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)]   49. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)]   49. LOBSTERLFA23-16AB [American lobster Magdalen Islands (LFA 22)]   49. LOBSTERLFA23-16AB [American lobster Southern Gulf of St. TB SSB ER F TB SSB ER F Lawrence]   50. LOBSTERLFA3-14 [American lobster Atlantic Coast of Nova Scotia   (LFA 27-33)]   51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]   52. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]   53. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]   54. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]   55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence]   56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas   56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas   57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs]   58. OFSC3Ps [Orange-footed sea cucumber Inshore Quebec Unit 8]   59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3]   59. SSB ER F   59
42. HERRATSP [Herring Southern Gulf of St. Lawrence (Spring spawners)] 43. HERRAVWX [Herring Scotian Shelf and Bay of Fundy] 44. HERRNFLDESC [Herring Newfoundland East and South Coast] 45. ILSCALL3PS [Iceland scallop St. Pierre Bank] 46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticost Island (LFA 15-18)] 47. LOBSTERLFA15-18 [American lobster Gaspe (LFA 19-21)] 48. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)] 47. LOBSTERLFA19-21 [American lobster Magdalen Islands (LFA 22)] 48. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. TB SSB ER F TB SSB
ers)]  43. HERR4VWX [Herring Scotian Shelf and Bay of Fundy]  43. HERR4VWX [Herring Newfoundland East and South Coast]  44. HERRNFLDESC [Herring Newfoundland East and South Coast]  45. ILSCALL3PS [Iceland scallop St. Pierre Bank]  46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticost is Island (LFA 15-18)]  47. LOBSTERLFA15-18 [American lobster Gaspe (LFA 19-21)]  48. LOBSTERLFA29-21 [American lobster Magdalen Islands (LFA 22)]  49. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)]  49. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. TB SSB ER F TB SSB ER F Lawrence]  50. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia (LFA 27-33)]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Area 34-1]  52. LOBSTERLFA3-3-4 [American lobster Lobster Fishing Area 34-1]  53. LOBSTERLFA3-3-5-38 [American lobster Lobster Fishing Area 34-1]  54. LOBSTERLFA3-3-3-38 [American lobster Lobster Fishing Area 34-1]  55. LOBSTERLFA3-3-4 [American lobster Lobster Fishing Area 34-1]  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas TB SSB ER F TB SSB ER
44. HERRNFLDESC [Herring Newfoundland East and South Coast]  44. HERRNFLDESC [Herring Newfoundland East and South Coast]  45. ILSCALL3PS [Iceland scallop St. Pierre Bank]  46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticosti Island (LFA 15-18)]  47. LOBSTERLFA15-18 [American lobster Gaspe (LFA 19-21)]  48. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)]  49. LOBSTERLFA19-22 [American lobster Magdalen Islands (LFA 22)]  49. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. Lawrence]  50. LOBSTERLFA23-33 [American lobster Atlantic Coast of Nova Scotia IB SSB ER F IB SSB ER F Lawrence]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]  52. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]  53. LOBSTERLFA3-3-8 [American lobster Lobster Fishing Area 34]  54. LOBSTERLFA3-3-8 [American lobster Lobster Fishing Area 34]  55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence]  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas IB SSB ER F I
44. HERRNFLDESC [Herring Newfoundland East and South Coast] TB SSB ER F TB SSB ER F 45. ILSCALL3PS [Iceland scallop St. Pierre Bank] 46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticosti Island (LFA 15-18)] 47. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)] TB SSB ER F TB SSB ER F TB SSB ER F 48. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)] TB SSB ER F
45. ILSCALL3Ps [Iceland scallop St. Pierre Bank] 46. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticost Island (LFA 15-18)] 47. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)] 48. LOBSTERLFA29-21 [American lobster Gaspe (LFA 19-21)] 49. LOBSTERLFA29-26AB [American lobster Magdalen Islands (LFA 22)] 49. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. Lawrence] 50. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia ITB SSB ER F I
46. LOBSTERLFÀ15-18 [American lobster Quebec North Shore and Anticosti Island (LFA 15-18)]  47. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)]  48. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)]  49. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. Lawrence]  50. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. Lawrence]  50. LOBSTERLFA23-33 [American lobster Atlantic Coast of Nova Scotia (LFA 27-33)]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]  52. LOBSTERLFA3-14 [American lobster Lobster Fishing Area 34]  53. LOBSTERLFA3-14 [American lobster Lobster Fishing Area 34]  54. LOBSTERLFA3-16 [American lobster Lobster Fishing Area 34]  55. LOBSTERLFA3 [American lobster Lobster Fishing Area 34]  56. LOBSTERLFA3 [American lobster Lobster Fishing Area 34]  57. LOBSTERLFA3 [American lobster Lobster Fishing Area 34]  58. DESE RF TB SSB ER F  59. LOBSTERLFA41 [American lobster Lobster Fishing Area 34]  59. LOBSTERLFA41 [American lobster Lobster Fishing Area 34]  50. LOBSTERLFA41 [American lobster Lobster Fishing Area 34]  51. LOBSTERLFA41 [American lobster Lobster Fishing Area 34]  52. LOBSTERLFA41 [American lobster Lobster Fishing Area 34]  53. LOBSTERLFA41 [American lobster Lobster Fishing Area 34]  54. LOBSTERLFA41 [American lobster Lobster Fishing Area 34]  55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence]  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas 3 and 4)]  57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs]  58. OFSC3Ps [Orange-footed sea cucumber Inshore Quebec Unit 3]  58. OFSC3Ps [Orange-footed sea cucumber Inshore Quebec Unit 3]  59. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit 3]  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit 6]  61. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit 7]  62. PANDALSFA10 [Northern shrimp Nunavut/Nunavik West]  63. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 12]  65. PANDALSFA2-3 [Northern shrimp Shrimp F
ticosti Island (LFA 15-18)]  47. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)]
47. LOBSTERLFA19-21 [American lobster Gaspe (LFA 19-21)]  48. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)]  49. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. Lawrence]  50. LOBSTERLFA23-26AB [American lobster Atlantic Coast of Nova Scotia   TB SSB   ER F   TB SSB   ER F   Lawrence]  50. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia   TB SSB   ER F   TB SSB   ER F   Lawrence]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]   TB SSB   ER F   TB SSB   ER F   Lawrence]  52. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]   TB SSB   ER F   TB SSB   ER F   Lawrence]   Lobster Fishing Areas 3-14]   TB SSB   ER F   Lobster Fishing Areas 3-
48. LOBSTERLFA22 [American lobster Magdalen Islands (LFÁ 22)]  49. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. TB SSB ER F TB SSB ER F Lawrence]  50. LOBSTERLFA23-36AB [American lobster Southern Gulf of St. Lawrence]  50. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia TB SSB ER F TB SSB ER F (LFA 27-33)]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14] TB SSB ER F TB SSB ER F TB SSB ER F TS 2. LOBSTERLFA34 [American lobster Lobster Fishing Areas 35-38] TB SSB ER F TB SSB ER F TS 3. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38] TB SSB ER F TB SSB ER F TS SL LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38] TB SSB ER F TB SSB ER F TS SL LOBSTERLFA41 [American lobster Lobster Fishing Area 41] TB SSB ER F TB SSB ER F TS SSB ER
49. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. TB SSB ER F TB SSB ER F Lawrence] 50. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia (LFA 27-33)] 51. LOBSTERLFA3-14 [American lobster Lobster Fishing Area 3-14] TB SSB ER F TB SSB ER F TS SSB
Lawrence]  50. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia TB SSB ER F TB SSB ER F (LFA 27-33)]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14] TB SSB ER F TB SSB ER F TS LOBSTERLFA34 [American lobster Lobster Fishing Areas 34] TB SSB ER F TB SSB ER F TS S
50. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia (LFA 27-33)]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14] TB SSB ER F TB SSB ER F  52. LOBSTERLFA34 [American lobster Lobster Fishing Areas 34] TB SSB ER F TB SSB ER F  53. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38] TB SSB ER F TB SSB ER F  54. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38] TB SSB ER F TB SSB ER F  55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence] TB SSB ER F TB SSB ER F  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas 3 and 4)]  57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs] TB SSB ER F TB SSB ER F  58. OFSC3Ps [Orange-footed sea cucumber Inshore Quebec Unit 3] TB SSB ER F TB SSB ER F  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3] TB SSB ER F TB SSB ER F  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] TB SSB ER F TB SSB ER F  63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] TB SSB ER F TB SSB ER F  64. PANDALSFA12 [Northern shrimp Fishing Area 10] TB SSB ER F TB SSB ER F  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] TB SSB ER F TB SSB ER F  66. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F  67. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F TB SSB ER F
(LFA 27-33)]  51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14] TB SSB ER F TB SSB ER F  52. LOBSTERLFA34 [American lobster Lobster Fishing Area 34] TB SSB ER F TB SSB ER F  53. LOBSTERLFA35-38 [American lobster Lobster Fishing Area 35-38] TB SSB ER F TB SSB ER F  54. LOBSTERLFA41 [American lobster Lobster Fishing Area 41] TB SSB ER F TB SSB ER F  55. LUMP3Ph4RS [Lumpfish Northern Gulf of St. Lawrence] TB SSB ER F TB SSB ER F  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas and 4)]  57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs] TB SSB ER F TB SSB ER F  58. OFSC3Ps [Orange-footed sea cucumber St. Pierre Bank] TB SSB ER F TB SSB ER F  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3] TB SSB ER F TB SSB ER F  60. OFSCIQCUG [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F  61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C] TB SSB ER F TB SSB ER F  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] TB SSB ER F TB SSB ER F  63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] TB SSB ER F TB SSB ER F  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10] TB SSB ER F TB SSB ER F  66. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] TB SSB ER F TB SSB ER F  66. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 2-3] TB SSB ER F TB SSB ER F  67. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F  68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F  69. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F
51. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]  52. LOBSTERLFA34 [American lobster Lobster Fishing Area 34]  53. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38]  54. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38]  55. LUBSTERLFA41 [American lobster Lobster Fishing Areas 35-38]  56. LOBSTERLFA41 [American lobster Lobster Fishing Area 41]  57. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence]  58. LOBSTERLFA41 [American lobster Lobster Fishing Area 41]  59. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence]  50. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas TB SSB ER F TB
52. LOBSTERLFA34 [American lobster Lobster Fishing Area 34] TB SSB ER F TB SSB ER F 53. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38] TB SSB ER F TB SSB ER F 54. LOBSTERLFA41 [American lobster Lobster Fishing Area 41] TB SSB ER F TB SSB ER F 55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence] TB SSB ER F TB SSB ER F 56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas 3 and 4)] 57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs] TB SSB ER F TB SSB ER F 58. OFSC3Ps [Orange-footed sea cucumber St. Pierre Bank] TB SSB ER F TB SSB ER F 59. OFSC1QCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3] TB SSB ER F TB SSB ER F 60. OFSC1QCUB [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F 61. OFSC1QCUC [Orange-footed sea cucumber Inshore Quebec Unit C] TB SSB ER F TB SSB ER F 62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] TB SSB ER F TB SSB ER F 63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] TB SSB ER F TB SSB ER F 64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10] TB SSB ER F TB SSB ER F 65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] TB SSB ER F TB SSB ER F 66. PANDALSFA42 [Northern shrimp Shrimp Fishing Area 2-3] TB SSB ER F TB SSB ER F 67. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F 68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F 70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F
53. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38] TB SSB ER F TB SSB ER F  54. LOBSTERLFA41 [American lobster Lobster Fishing Area 41] TB SSB ER F TB SSB ER F  55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence] TB SSB ER F TB SSB ER F  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas TB SSB ER F TB SSB ER F  3 and 4)]  57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs] TB SSB ER F TB SSB ER F  58. OFSC3Ps [Orange-footed sea cucumber St. Pierre Bank] TB SSB ER F TB SSB ER F  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3] TB SSB ER F TB SSB ER F  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F  61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C] TB SSB ER F TB SSB ER F  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] TB SSB ER F TB SSB ER F  63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] TB SSB ER F TB SSB ER F  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10] TB SSB ER F TB SSB ER F  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] TB SSB ER F TB SSB ER F  66. PANDALSFA13-15 [Northern shrimp Shrimp Fishing Area 2-3] TB SSB ER F TB SSB ER F  67. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F  68. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F  69. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F
54. LOBSTERLFA41 [American lobster Lobster Fishing Area 41]  55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence]  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas TB SSB ER F TB SSB ER F TB A and 4)]  57. MONK3LNOPS [Monkfish NAFO Divisions 3LNOPs]  58. OFSC3PS [Orange-footed sea cucumber St. Pierre Bank]  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3]  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B]  61. OFSCIQCUG [Orange-footed sea cucumber Inshore Quebec Unit C]  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East]  63. PANDALNUNE [Northern shrimp Nunavut/Nunavik West]  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  65. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Area 2-3]  66. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  67. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 6]  78. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  79. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]
55. LUMP3Pn4RS [Lumpfish Northern Gulf of St. Lawrence]  56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas 3 and 4)]  57. MONK3LNOPS [Monkfish NAFO Divisions 3LNOPS]  58. OFSC3PS [Orange-footed sea cucumber St. Pierre Bank]  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3]  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit 8]  61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit 8]  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East]  63. PANDALNUNE [Northern shrimp Nunavut/Nunavik West]  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]  66. PANDALSFA13-15 [Northern shrimp Shrimp Fishing Area 2-3]  67. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  68. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  73. BSSB ER F  74. BSSB ER F  75. BSSB ER F  76. BSSB ER F  76. BSSB ER F  77. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  78. BSSB ER F  79. BSSB ER F  79. BSSB ER F  70. BSSB ER F  70. BSSB ER F  70. BSSB ER F  70. BSSB ER F  71. BSSB ER F  71. BSSB ER F  71. BSSB ER F  71. BSSB ER F  72. BSSB ER F  74. BSSB ER F  75. BSSB ER F  75. BSSB ER F  76. BSSB ER F  77. BSSB ER F  78. BSS
56. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas 3 and 4)]  57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs]  58. OFSC3Ps [Orange-footed sea cucumber St. Pierre Bank]  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3]  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B]  61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit B]  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East]  63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West]  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]  66. PANDALSFA13-15 [Northern shrimp Shrimp Fishing Area 2-3]  67. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  68. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F  TB SSB ER F
3 and 4)]  57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs]  TB SSB ER F  TB SSB ER F  58. OFSC3Ps [Orange-footed sea cucumber St. Pierre Bank]  TB SSB ER F  TB SSB ER F  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3]  TB SSB ER F  TB SSB ER F  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B]  TB SSB ER F  TB SSB ER F  61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C]  TB SSB ER F  TB SSB ER F  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East]  TB SSB ER F  TB SSB ER F  63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West]  TB SSB ER F  TB SSB ER F  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  TB SSB ER F  TB SSB ER F  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]  TB SSB ER F  TB SSB ER F  TB SSB ER F  66. PANDALSFA2-3 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]  67. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  TB SSB ER F
57. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs]TB SSB ER FTB SSB ER F58. OFSC3Ps [Orange-footed sea cucumber St. Pierre Bank]TB SSB ER FTB SSB ER F59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3]TB SSB ER FTB SSB ER F60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B]TB SSB ER FTB SSB ER F61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C]TB SSB ER FTB SSB ER F62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East]TB SSB ER FTB SSB ER F63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West]TB SSB ER FTB SSB ER F64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]TB SSB ER FTB SSB ER F65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]TB SSB ER FTB SSB ER F66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]TB SSB ER FTB SSB ER F67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Area 2-3]TB SSB ER FTB SSB ER F68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]TB SSB ER FTB SSB ER F69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]TB SSB ER FTB SSB ER F70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]TB SSB ER FTB SSB ER F71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]TB SSB ER FTB SSB ER F
58. OFSC3Ps [Orange-footed sea cucumber St. Pierre Bank]  59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3]  60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B]  61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C]  62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East]  63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West]  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]  66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]  67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Area 4]  68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 4]  60. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 5]  60. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  61. TB SSB ER F  62. TB SSB ER F  63. TB SSB ER F  64. TB SSB ER F  65. TB SSB ER F  66. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  67. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  68. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  69. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  70. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  72. TB SSB ER F  73. TB SSB ER F  74. TB SSB ER F  75. TB SSB ER F  76. TB SSB ER F  77. TB SSB ER F  77. TB SSB ER F  78. TB
59. OFSCIQCU3 [Orange-footed sea cucumber Inshore Quebec Unit 3] TB SSB ER F TB SSB ER F 60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F 61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C] TB SSB ER F TB SSB ER F 62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] TB SSB ER F TB SSB ER F 63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] TB SSB ER F TB SSB ER F 64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10] TB SSB ER F TB SSB ER F 65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] TB SSB ER F TB SSB ER F 66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)] TB SSB ER F TB SSB ER F 67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Area 2-3] TB SSB ER F TB SSB ER F 68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F 69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F 70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F TB SSB ER F
60. OFSCIQCUB [Orange-footed sea cucumber Inshore Quebec Unit B] TB SSB ER F TB SSB ER F 61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C] TB SSB ER F TB SSB ER F 62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] TB SSB ER F TB SSB ER F 63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] TB SSB ER F TB SSB ER F 64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10] TB SSB ER F TB SSB ER F 65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] TB SSB ER F TB SSB ER F 66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)] 67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Area 2-3] TB SSB ER F TB SSB ER F 68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F 69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F 70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F TB SSB ER F
61. OFSCIQCUC [Orange-footed sea cucumber Inshore Quebec Unit C] TB SSB ER F TB SSB ER F 62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] TB SSB ER F TB SSB ER F 63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] TB SSB ER F TB SSB ER F 64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10] TB SSB ER F TB SSB ER F 65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] TB SSB ER F TB SSB ER F 66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)] 67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Area 2-3] TB SSB ER F TB SSB ER F 68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] TB SSB ER F TB SSB ER F 69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5] TB SSB ER F TB SSB ER F 70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] TB SSB ER F TB SSB ER F 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8] TB SSB ER F TB SSB ER F
62. PANDALNUNE [Northern shrimp Nunavut/Nunavik East] 63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West] 64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10] 65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12] 66. PANDALSFA12 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)] 67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3] 68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] 69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5] 69. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 60. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 60. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 61. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 62. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 63. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 64. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 65. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 66. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 67. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8] 68. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 69. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8] 60. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8] 61. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8] 62. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 8]
63. PANDALNUNW [Northern shrimp Nunavut/Nunavik West]  64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]  66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]  67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3]  68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F
64. PANDALSFA10 [Northern shrimp Shrimp Fishing Area 10]  65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]  66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]  67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3]  68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F
65. PANDALSFA12 [Northern shrimp Shrimp Fishing Area 12]  66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]  67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3]  68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F
66. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]  67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3]  68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F
15)] 67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3] 68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4] 69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5] 70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6] 71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F
67. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3]  68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F
68. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]  69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F
69. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]  70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  72. TB SSB ER F  73. TB SSB ER F  74. TB SSB ER F  75. TB SSB ER F  76. TB SSB ER F  77. TB SSB ER F  78. TB SSB ER F  79. TB SSB ER F  70. TB SSB ER F  71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]
70. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]TB SSBER FTB SSBER F71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]TB SSBER FTB SSBER F
71. PANDALSFA8 [Northern shrimp Shrimp Fishing Area 8]  TB SSB ER F  TB SSB ER F
- , ,
TIZ PANDALSPAY INOTIDERI SOTITIO SOTITIO EISOTO AREA 91 TE SSB   FB F   TB SSB   FB F   T
73. POLL3Ps [Pollock St. Pierre Bank]  TB SSB ER F  TB SSB ER F  TB SSB ER F  TB SSB ER F
74. POLL4VWX [Pollock Scotian Shelf and Bay of Fundy]  TB SSB ER F  TB SSB ER F  TB SSB ER F  TB SSB ER F
75. PORSHARATL [Porbeagle shark Canadian Atlantic Ocean]  TB SSB ER F  TB SSB ER F  TB SSB ER F  TB SSB ER F
76. REDFISHSPP3LN [Redfish species N and SW Grand Banks] TB SSB   ER F   TB SSB   ER F
77. REDFISHSPP3M [Redfish species Flemish Cap]  TB SSB ER F TB SSB ER F

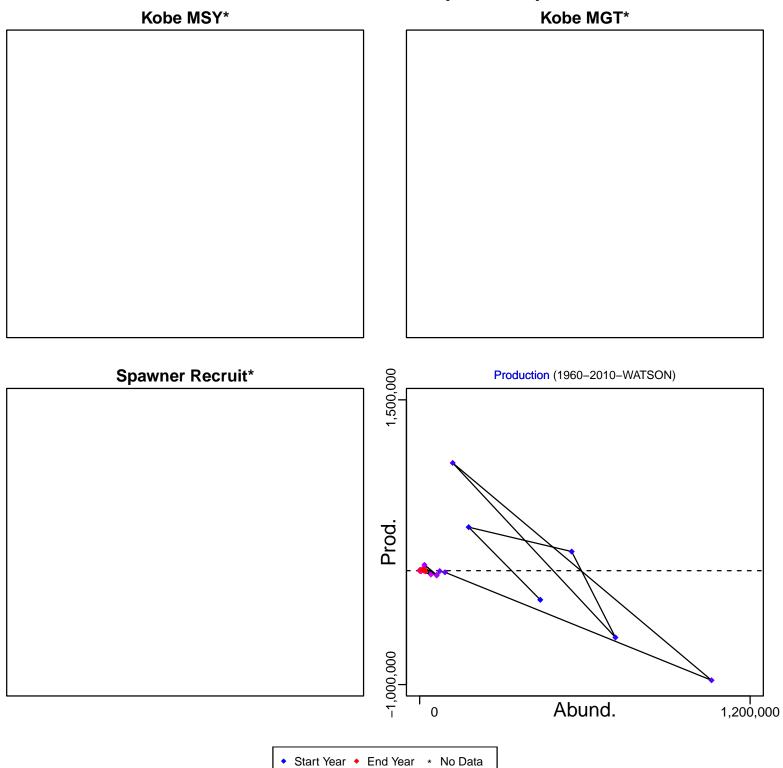
80. ROCKCRABLFA23-26 [Rock crab Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
81. ROCKCRABQCW [Rock crab Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
82. SCALL3Ps [Sea scallop St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
83. SCALL4T [Sea scallop Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
84. SCALLGB [Sea scallop Georges Bank]	TB SSB	ER F	TB SSB	ER F
85. SCALLNBB [Sea scallop North Brown Bank]	TB SSB	ER F	TB SSB	ER F
	TB SSB	ER F	TB SSB	ER F
86. SCALLSFA16-20 [Sea scallop Scallop Fishing Areas 16-20]	TB SSB	ER F	TB SSB	ER F
87. SCALLSPA1-6 [Sea scallop Bay of Fundy (SPA 1-6)]	TB SSB	ER F	TB SSB	ER F
88. SCALLWSFA29 [Sea scallop West Scallop Fishing Area 29]				
89. SDOG4VWX5 [Spiny dogfish Scotian Shelf, Bay of Fundy and	TB SSB	ER F	TB SSB	ER F
Georges Bank]	TD COD	-D -	TD COD	-D -
90. SHAKE4VWX [Silver hake Scotian Shelf and Bay of Fundy]	TB SSB	ER F	TB SSB	ER F
91. SMOOTHSKA2J3K [Smooth skate NAFO Division 2J3K]	TB SSB	ER F	TB SSB	ER F
92. SMOOTHSKA4T [Smooth skate Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
93. SNOWCRAB2HJ [Snow crab Division 2HJ]	TB SSB	ER F	TB SSB	ER F
94. SNOWCRAB3K [Snow crab Division 3K]	TB SSB	ER F	TB SSB	ER F
95. SNOWCRAB3LNO [Snow crab Division 3LNO]	TB SSB	ER F	TB SSB	ER F
96. SNOWCRAB3Ps [Snow crab St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
97. SNOWCRAB4R3Pn [Snow crab Division 4R3Pn]	TB SSB	ER F	TB SSB	ER F
98. SNOWCRAB4X [Snow crab Western Scotian Shelf]	TB SSB	ER F	TB SSB	ER F
99. SNOWCRABNENS [Snow crab North-Eastern Nova Scotia]	TB SSB	ER F	TB SSB	ER F
100. SNOWCRABSCMA12-17 [Snow crab Northern Gulf of St.	TB SSB	ER F	TB SSB	ER F
Lawrence]				
101. SNOWCRABSENS [Snow crab South-Eastern Nova Scotia]	TB SSB	ER F	TB SSB	ER F
102. SNOWCRABSGSL [Snow crab Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
103. SSCLAMQCW [Softshell clam Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
104. STRSHRIMPNUNE [Aesop shrimp Nunavut/Nunavik East]	TB SSB	ER F	TB SSB	ER F
105. STRSHRIMPNUNW [Aesop shrimp Nunavut/Nunavik West]	TB SSB	ER F	TB SSB	ER F
106. STRSHRIMPSFA4 [Aesop shrimp Shrimp Fishing Area 4]	TB SSB	ER F	TB SSB	ER F
107. SURFIDLM [Atlantic surfclam Iles-de-la-Madeleine]	TB SSB	ER F	TB SSB	ER F
108. TSKA3LNOPs [Thorny skate Grand Bank and St Pierre Bank]	TB SSB	ER F	TB SSB	ER F
109. TSKA4T [Thorny skate Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
110. WHAKE3Ps [White hake St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
111. WHAKE4RS [White hake Northern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
112. WHAKE4T [White hake Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
113. WHAKE4VWX5 [White hake Scotian Shelf, Bay of Fundy and	TB SSB	ER F	TB SSB	ER F
Georges Bank]			-= 555	•
114. WINFLOUN4T [Winter flounder Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
115. WITFLOUN2J3KL [Witch flounder Southern Labrador-Eastern	TB SSB	ER F	TB SSB	ER F
Newfoundland]				
116. WITFLOUN3Ps [Witch flounder St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
117. WITFLOUN4RST [Witch flounder Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
118. WWHELKQCW [Waved whelk Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
119. YELL3LNO [Yellowtail flounder Grand Banks]	TB SSB	ER F	TB SSB	ER F
120. YELL4T [Yellowtail flounder Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
120. 12241 [Tollowial Houridor Coullier Gall of Ot. Lawrence]	ים ססם	411.1	וויייייייייייייייייייייייייייייייייייי	<u> </u>

### Acadian redfish NAFO Division 2J3K [ACADRED2J3K]

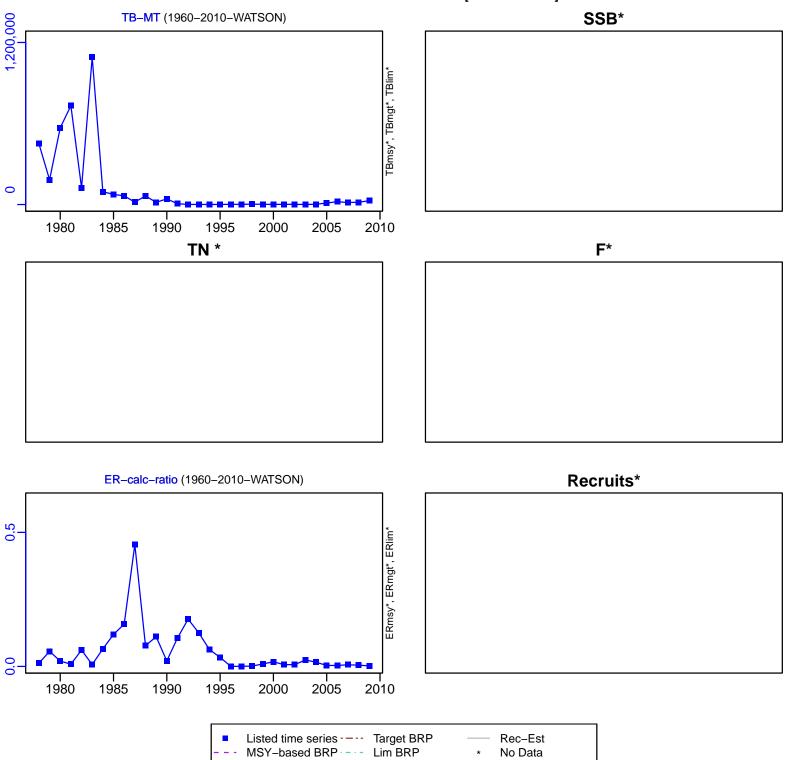
Metadata				
Scientific Name	Sebastes fasciatus			
Current Assess ID	DFO-ACADRED2J3K-1960-2010-WATSON			
Area	NAFO Division 2J3K			
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans			
Asmts in RAM	2010			

Reference Points						
Туре	ID	Asmt Year	Value			
TBmsy	-	-	-			
SSBmsy	-	-	-			
Fmsy	-	-	-			
ERmsy	-	-	-			
TBmgt	-	-	-			
SSBmgt	-	-	-			
Fmgt	-	-	-			
ERmgt	-	-	-			
TB0	-	-	-			
SSB0	-	-	-			
MSY	MSY-MT	2010	3000			
M	-	-	-			
TBlim	-	-	-			
SSBlim	-	-	-			
Flim	-	-	-			
ERlim	-	-	-			

	Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age		
ТВ	TB-MT	2010	27,600	-	-		
SSB	-	-	-	-	-		
TN	-	-	-	-	-		
R	-	-	-	-	-		
F	-	-	-	-	-		
ER	ER-calc-ratio	2010	0.002	-	-		
TC	TC-MT	2010	49				
TL	-	-	-				
TB/TBmsy	-	-	-				
SSB/SSBmsy	-	-	-				
F/Fmsy	-	-	-				
ER/ERmsy	-	-	-				
TB/TBmgt	-	-	-				
SSB/SSBmgt	-	-	-				
F/Fmgt	-	-	-				
ER/ERmgt	-	-	-				

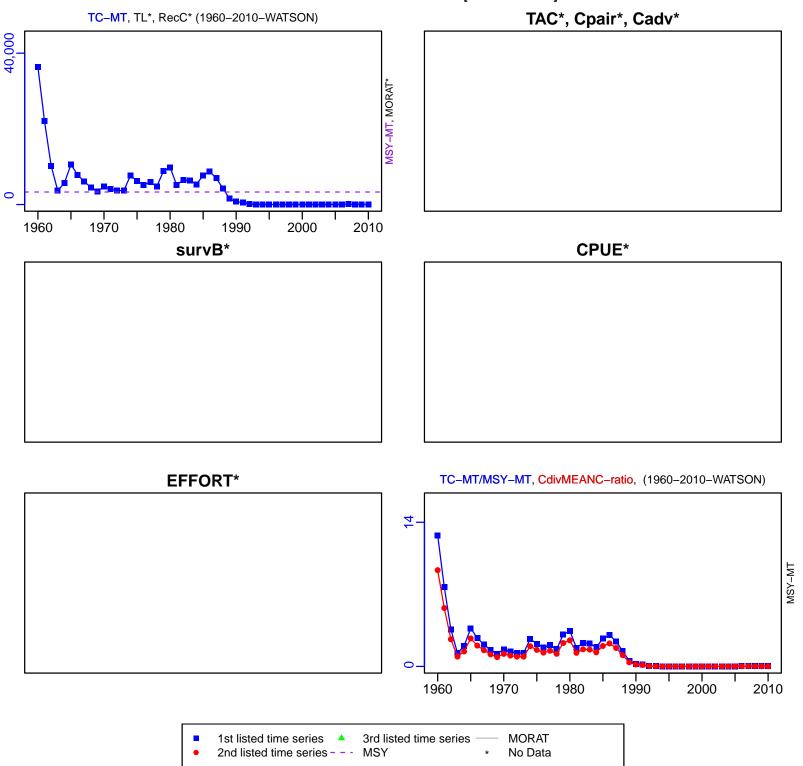


#### Acadian redfish NAFO Division 2J3K [ACADRED2J3K]



No Data

#### Acadian redfish NAFO Division 2J3K [ACADRED2J3K]

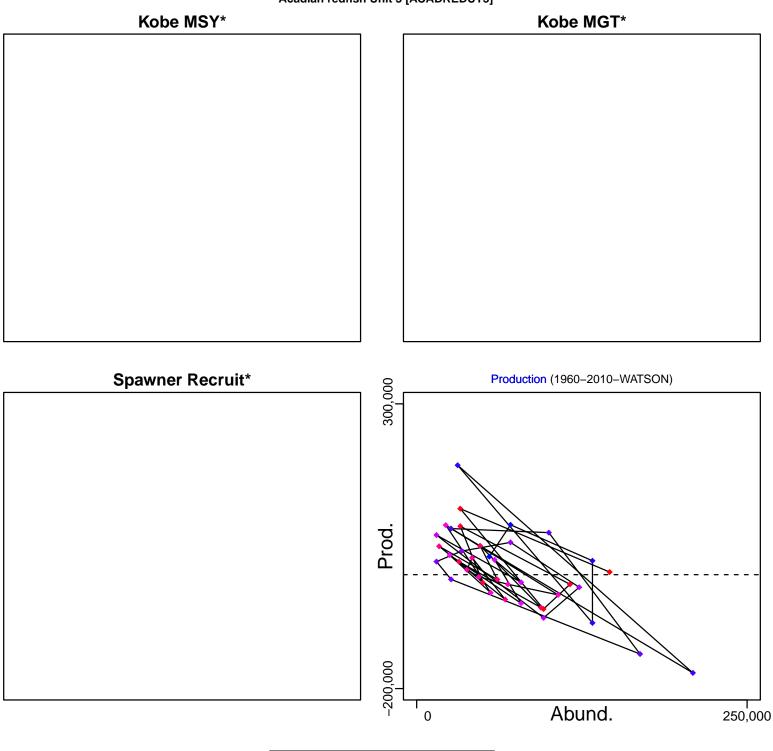


## Acadian redfish Unit 3 [ACADREDUT3]

Metadata				
Scientific Name	Sebastes fasciatus			
Current Assess ID	DFO-ACADREDUT3-1960-2010-WATSON			
Area	Unit 3			
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans			
Asmts in RAM	2010			

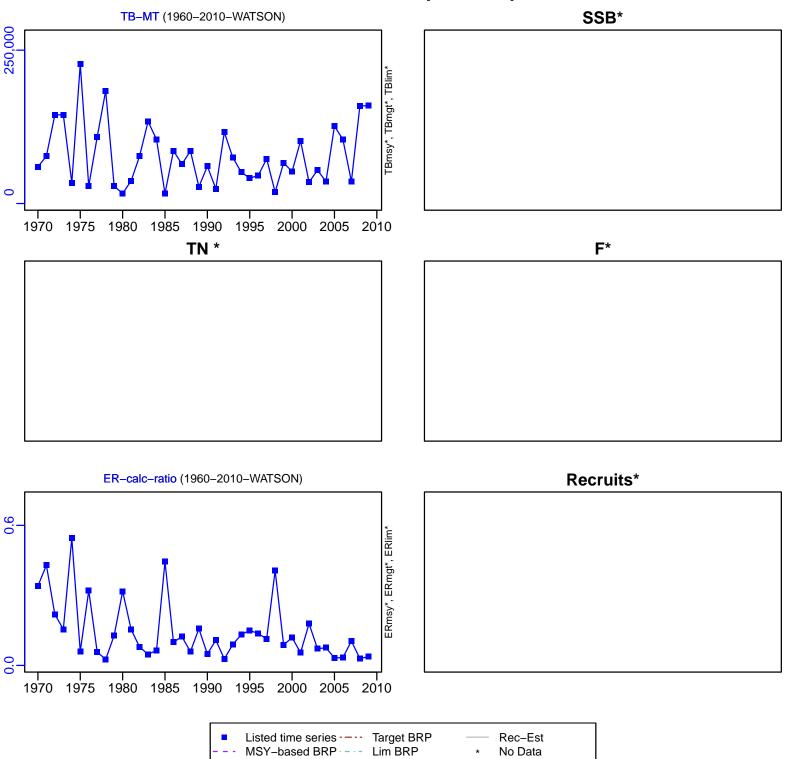
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	MSY-MT	2010	131,000		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2010	147,000	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2010	0.031	-	-	
TC	TC-MT	2010	5200			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

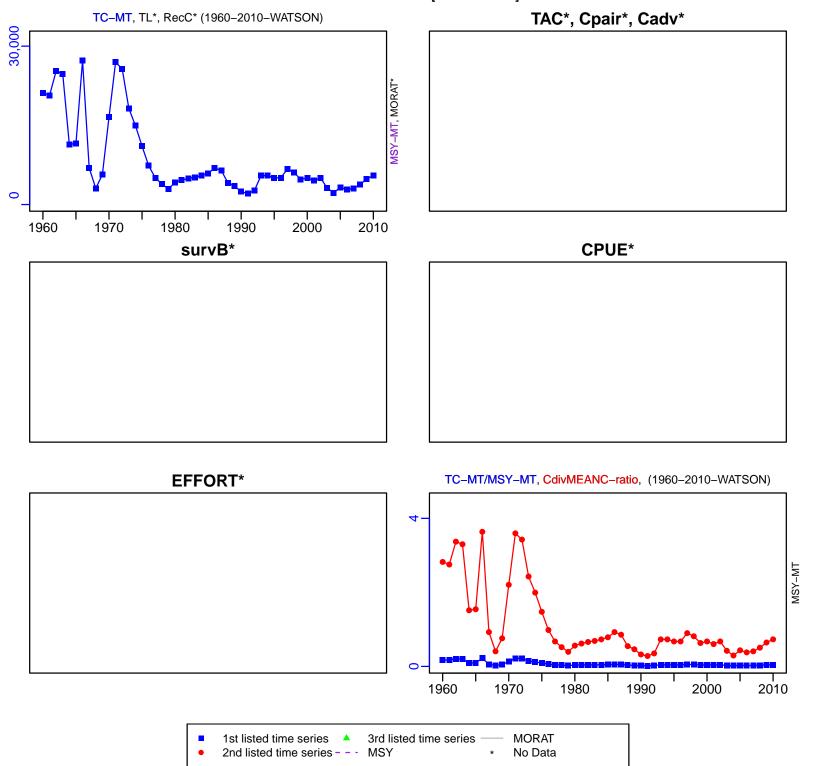


Start Year • End Year \* No Data

#### Acadian redfish Unit 3 [ACADREDUT3]



#### Acadian redfish Unit 3 [ACADREDUT3]

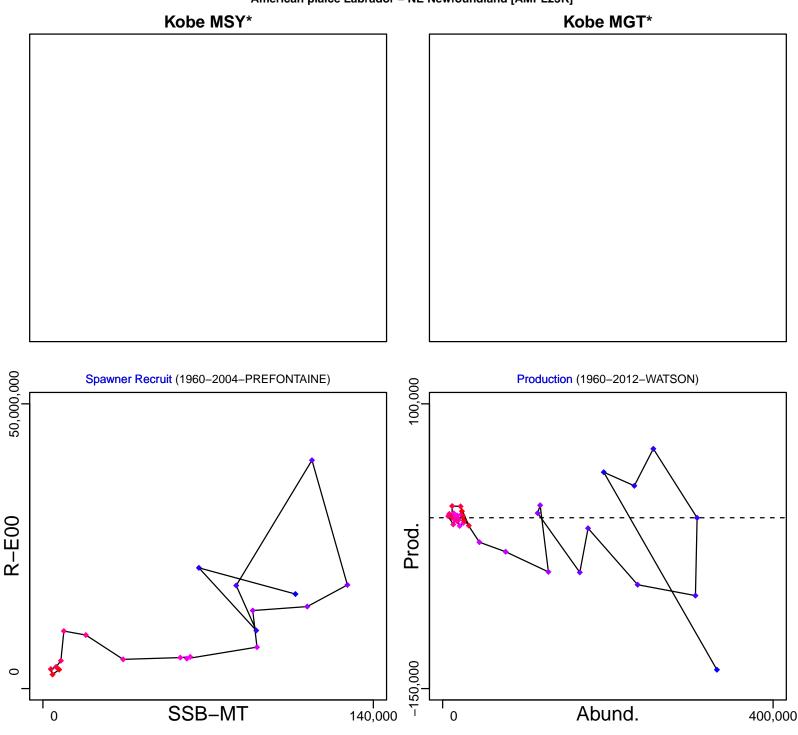


### American plaice Labrador - NE Newfoundland [AMPL23K]

Metadata				
Scientific Name	Hippoglossoides platessoides			
Current Assess ID	DFO-AMPL23K-1960-2012-WATSON			
Area	Labrador - NE Newfoundland			
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans			
Asmts in RAM	2012, 2004			

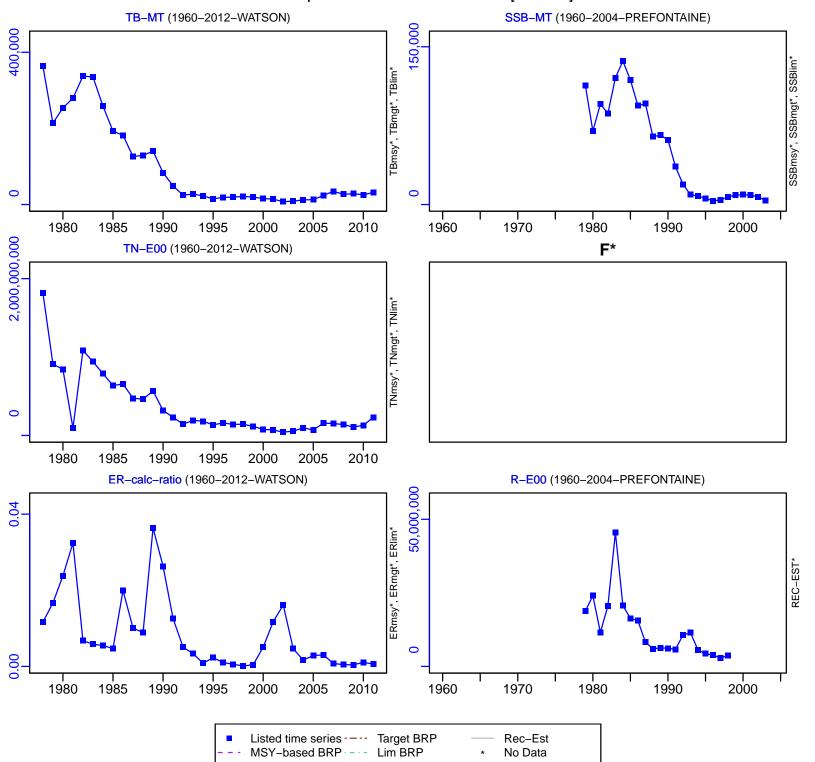
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
M	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2012	29,000	Both	-
SSB	SSB-MT	2004	3620	Females	-
TN	TN-E00	2012	$2.17 \times 10^{8}$	-	-
R	R-E00	2004	3,330,000	-	3+
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.001	-	-
TC	TC-MT	2012	17		
TL	TL-MT	2012	65		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

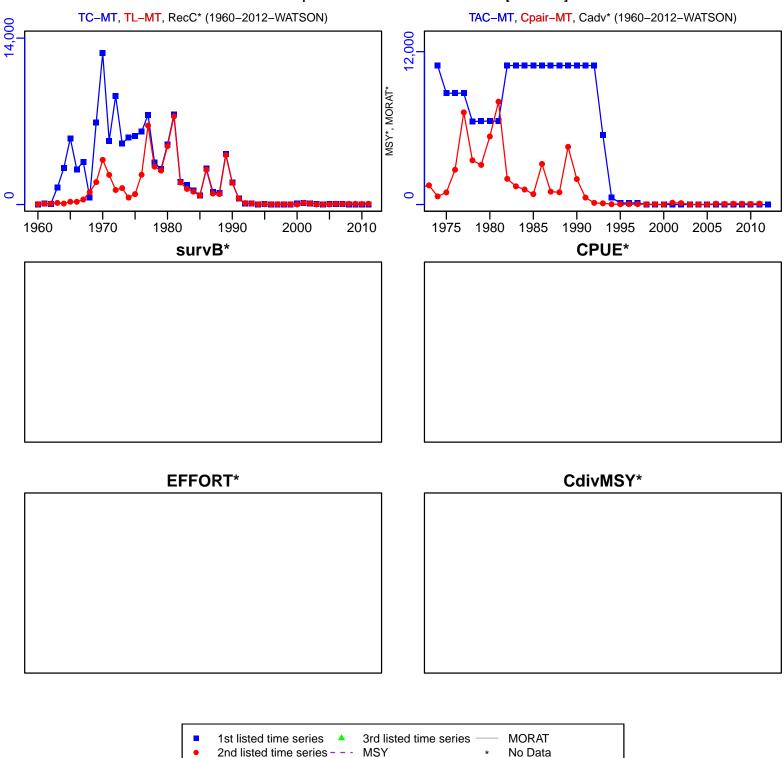


Start Year ◆ End Year \* No Data

#### American plaice Labrador - NE Newfoundland [AMPL23K]



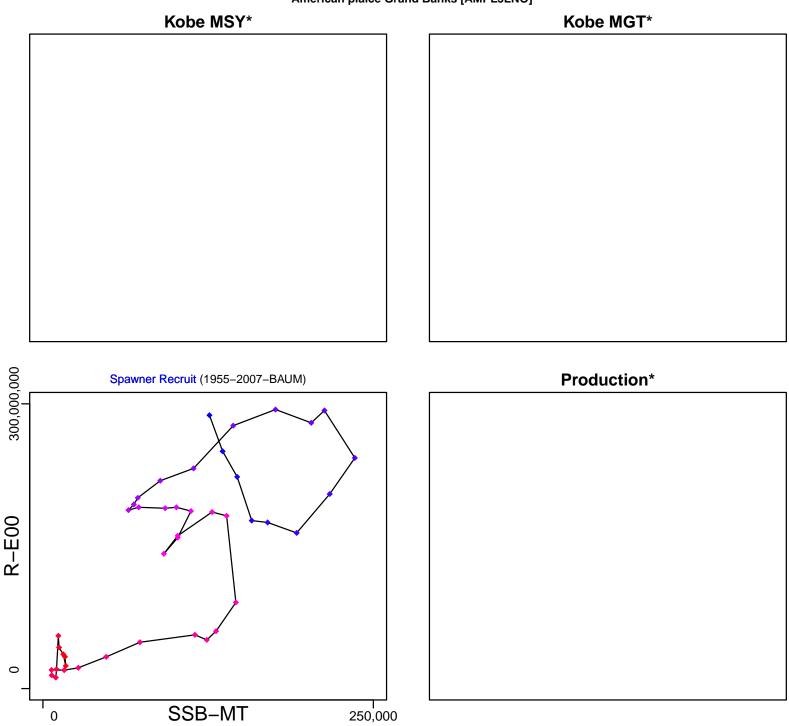
#### American plaice Labrador - NE Newfoundland [AMPL23K]



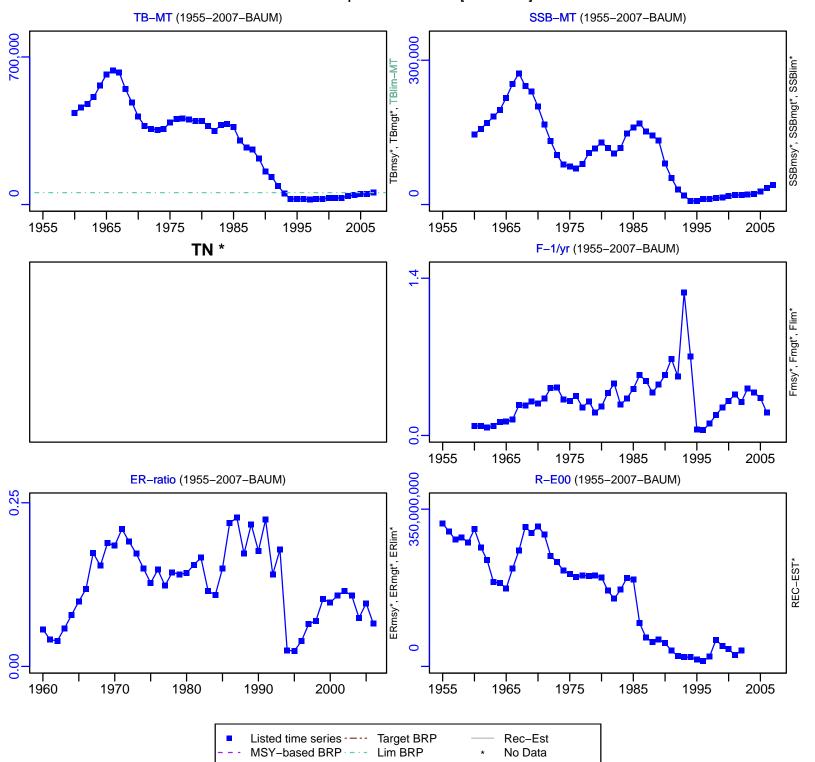
Metadata		
Scientific Name Hippoglossoides platessoides		
Current Assess ID	NAFO-SC-AMPL3LNO-1955-2007-BAUM	
Area Grand Banks		
Management Authority Northwest Atlantic Fisheries Organization		
Assessor NAFO Scientific Council		
Asmts in RAM	2007	

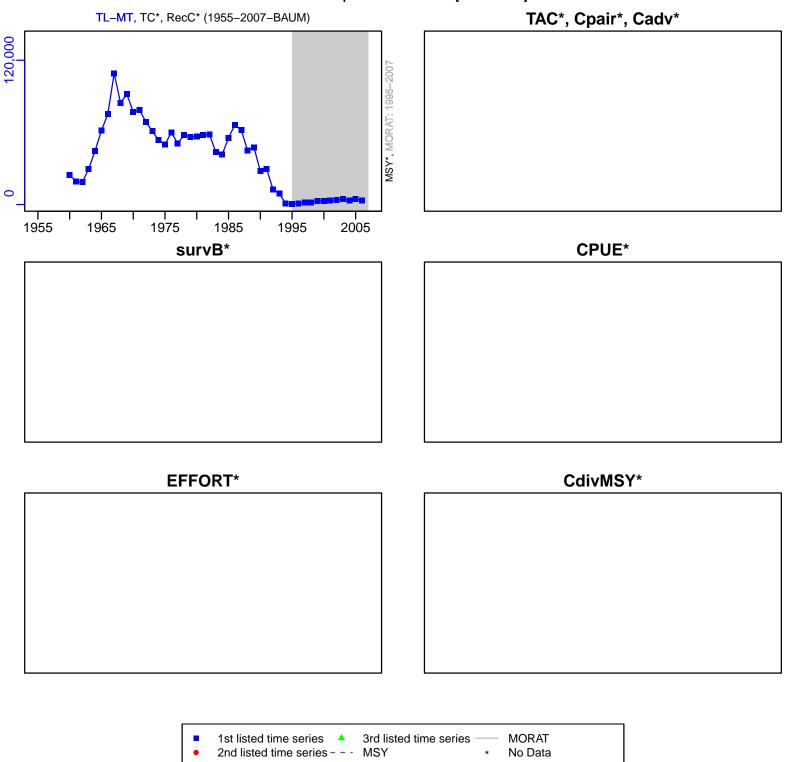
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2007	0.2		
TBlim	TBlim-MT	2007	50,000		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2007	50,500	-	5+
SSB	SSB-MT	2007	35,500	Both	-
TN	-	-	-	-	-
R	R-E00	2007	33,500,000	-	5
F	F-1/yr	2007	0.193	Both	9 to 14
ER	ER-ratio	2007	0.064	-	-
TC	-	-	-		
TL	TL-MT	2007	2830		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Start Year • End Year \* No Data



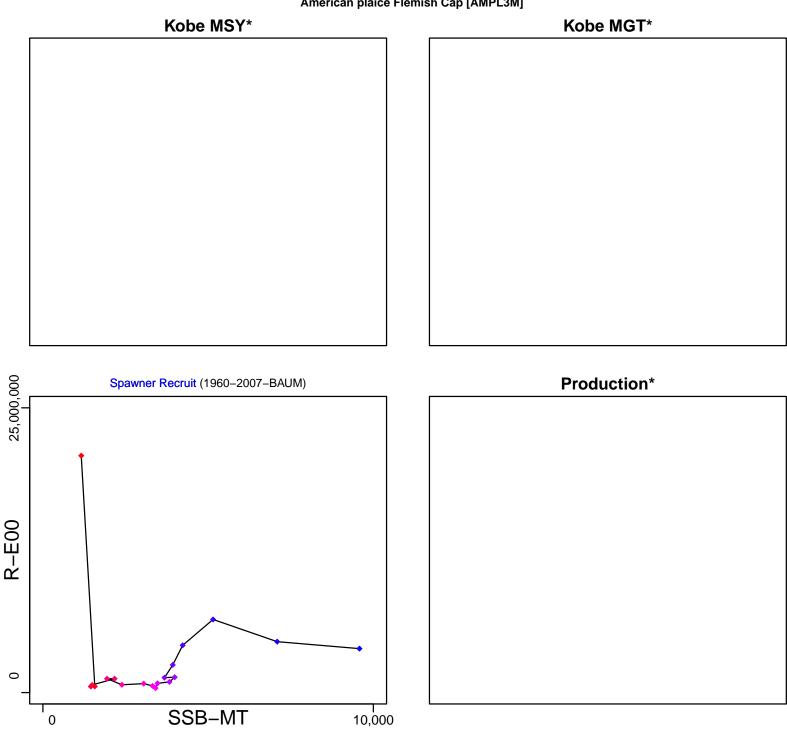


## American plaice Flemish Cap [AMPL3M]

Metadata		
Scientific Name Hippoglossoides platessoides		
Current Assess ID	NAFO-SC-AMPL3M-1960-2007-BAUM	
Area Flemish Cap		
Management Authority Northwest Atlantic Fisheries Organizat		
Assessor NAFO Scientific Council		
Asmts in RAM 2007		

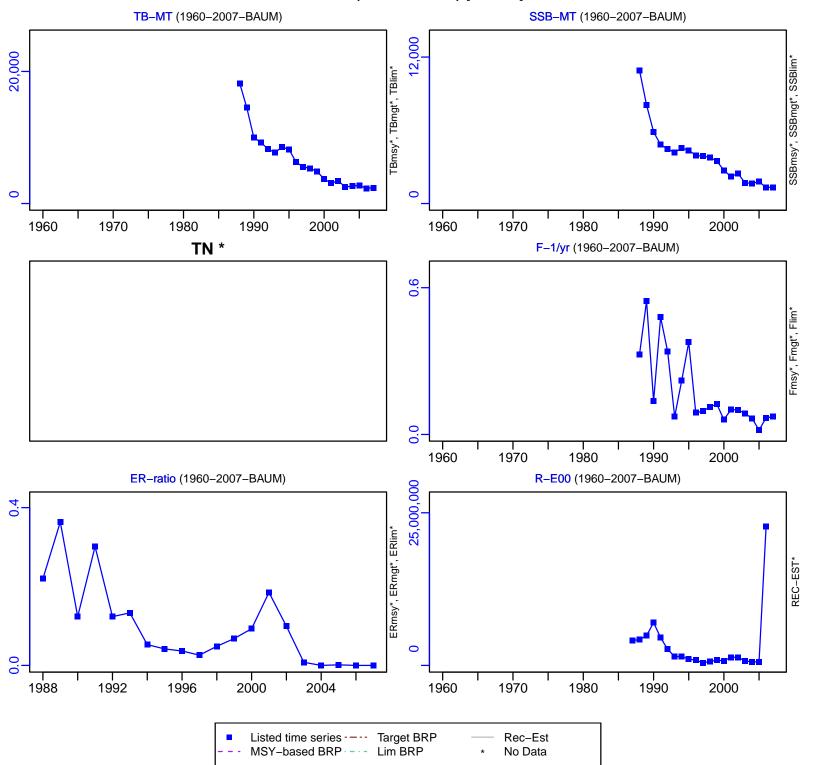
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
M	M-1/yr	2007	0.2		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2007	1890	-	-	
SSB	SSB-MT	2007	1170	Females	5+	
TN	-	-	-	-	-	
R	R-E00	2007	20,800,000	-	1	
F	F-1/yr	2007	0.064	-	3 to 13	
ER	ER-ratio	2007	0	-	-	
TC	TC-MT	2007	0			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

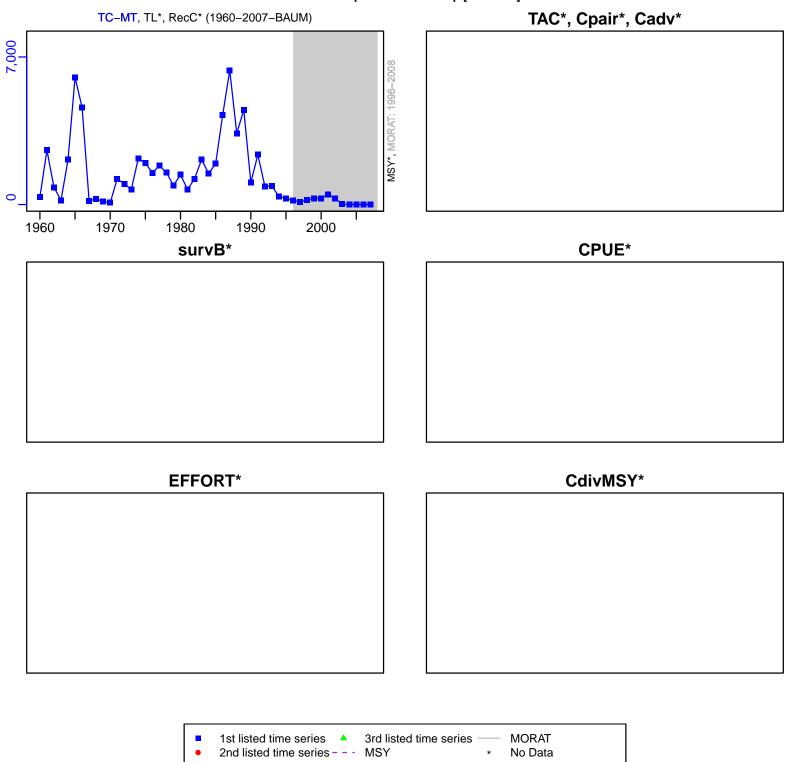


Start Year → End Year → No Data

#### American plaice Flemish Cap [AMPL3M]



### American plaice Flemish Cap [AMPL3M]



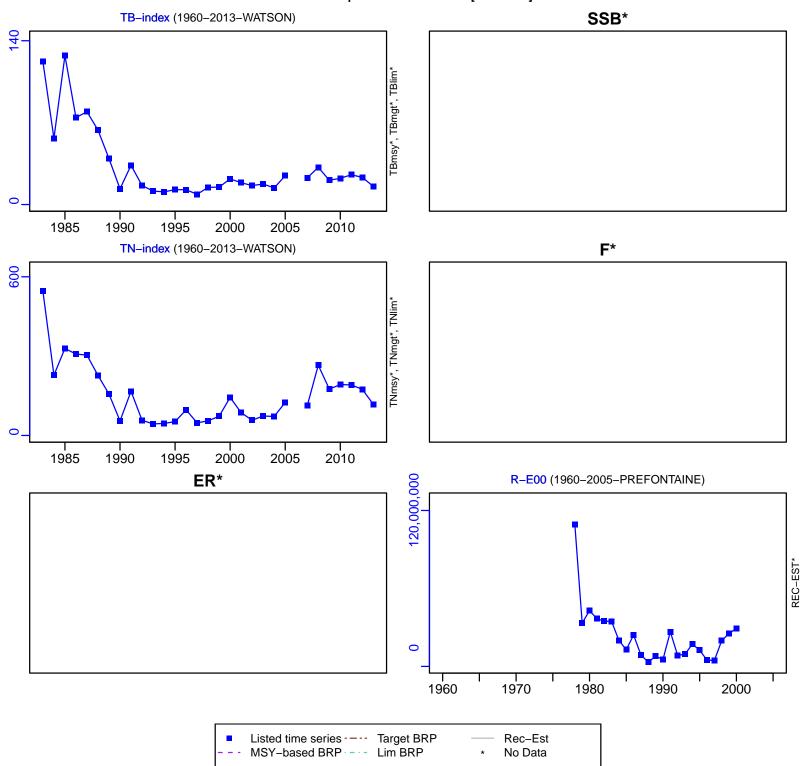
Metadata			
Scientific Name	Hippoglossoides platessoides		
Current Assess ID	DFO-AMPL3Ps-1960-2013-WATSON		
Area St. Pierre Bank			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor Department of Fisheries and Oceans			
Asmts in RAM	2013, 2005		

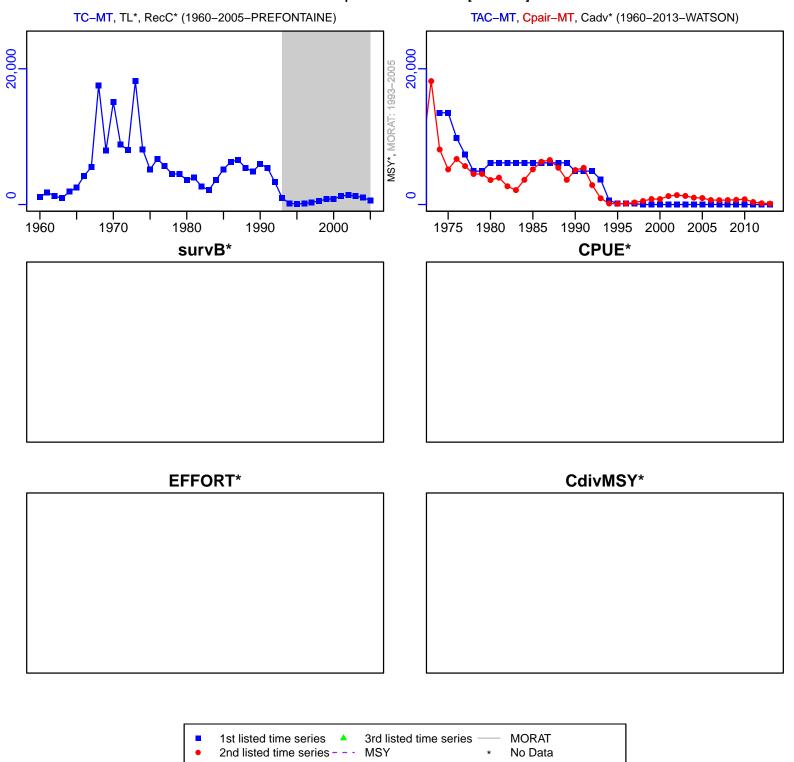
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-index	2013	15	Both	-
SSB	-	-	-	-	-
TN	TN-index	2013	112	-	-
R	R-E00	2005	27,200,000	-	5
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2005	503		
TL	TL-MT	2013	103		
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



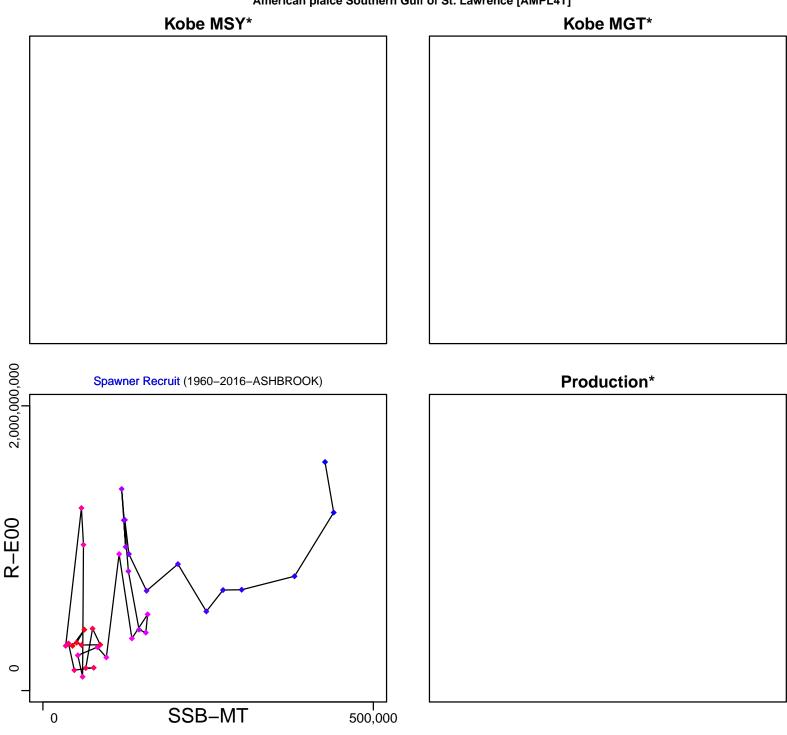


### American plaice Southern Gulf of St. Lawrence [AMPL4T]

Metadata			
Scientific Name	Hippoglossoides platessoides		
Current Assess ID	DFO-SG-AMPL4T-1960-2016-ASHBROOK		
Area Southern Gulf of St. Lawrence			
Management Authority   Department of Fisheries and Oceans, Canada national managem			
Assessor Department of Fisheries and Oceans - Southern Gulf Region			
Asmts in RAM	2012, 2016		

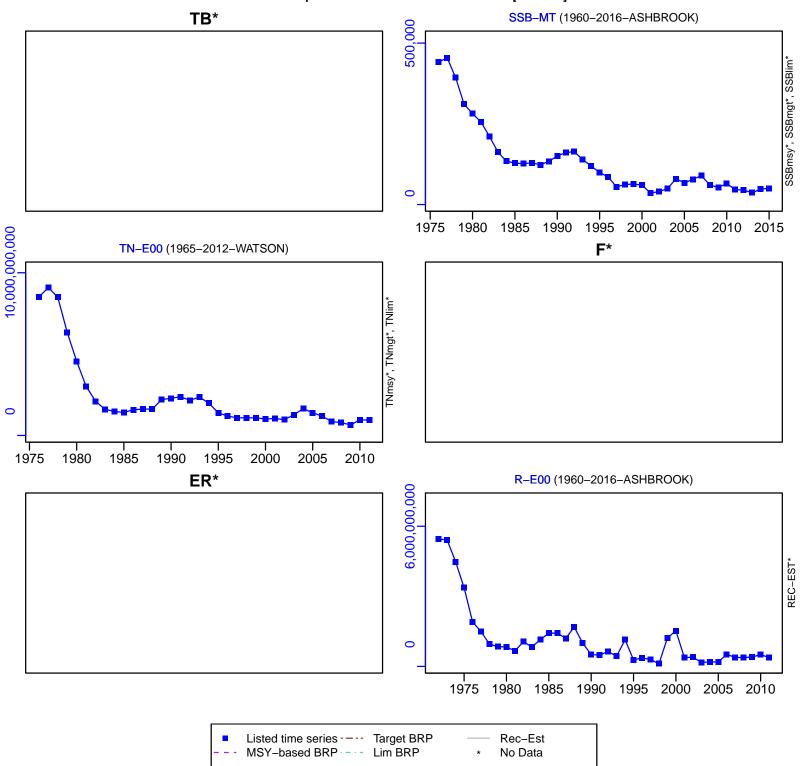
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	M-1/yr	2016	0.39	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2012	64,000	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2016	48,664	-	-
TN	TN-E00	2012	$9.26 \times 10^{8}$	-	4 to 9
R	R-E00	2016	314,261,730	-	4
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2012	90		
TL	TL-MT	2016	120		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

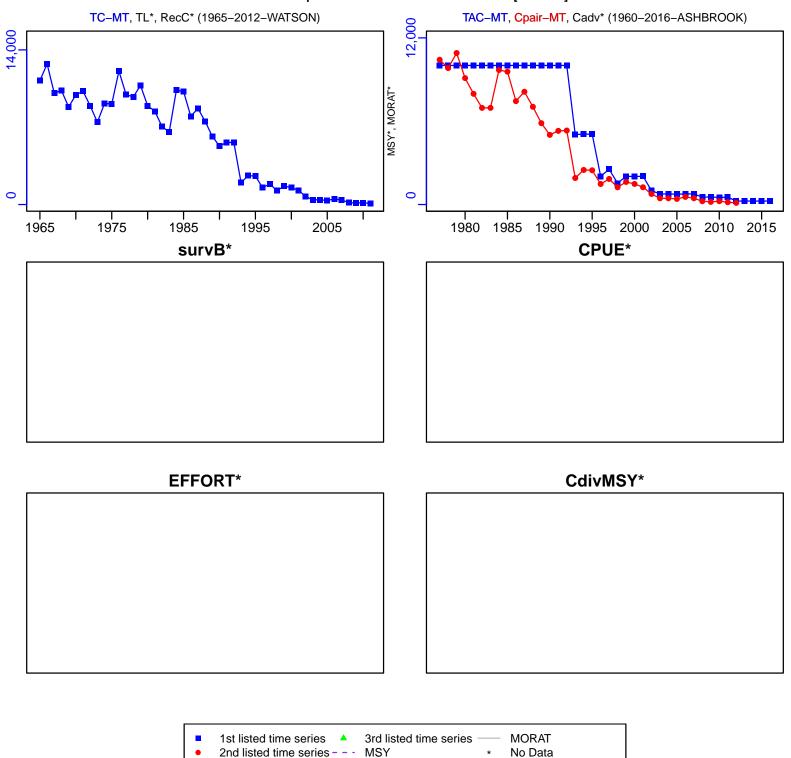


Start Year • End Year \* No Data

#### American plaice Southern Gulf of St. Lawrence [AMPL4T]



#### American plaice Southern Gulf of St. Lawrence [AMPL4T]



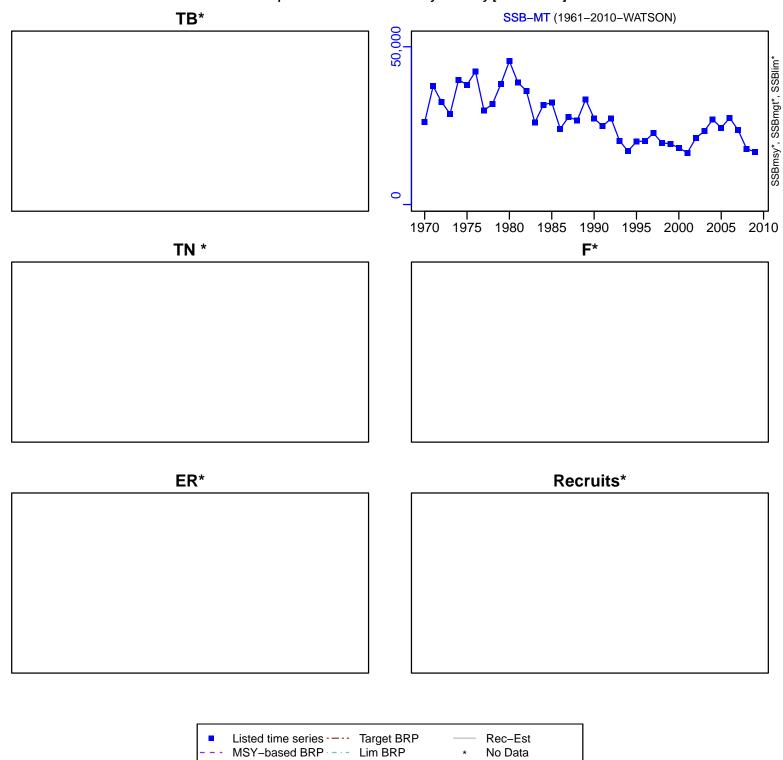
Metadata				
Scientific Name	Hippoglossoides platessoides			
Current Assess ID DFO-AMPL4VWX-1961-2010-WATSON				
Area Scotian Shelf and Bay of Fundy				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans			
Asmts in RAM	2010			

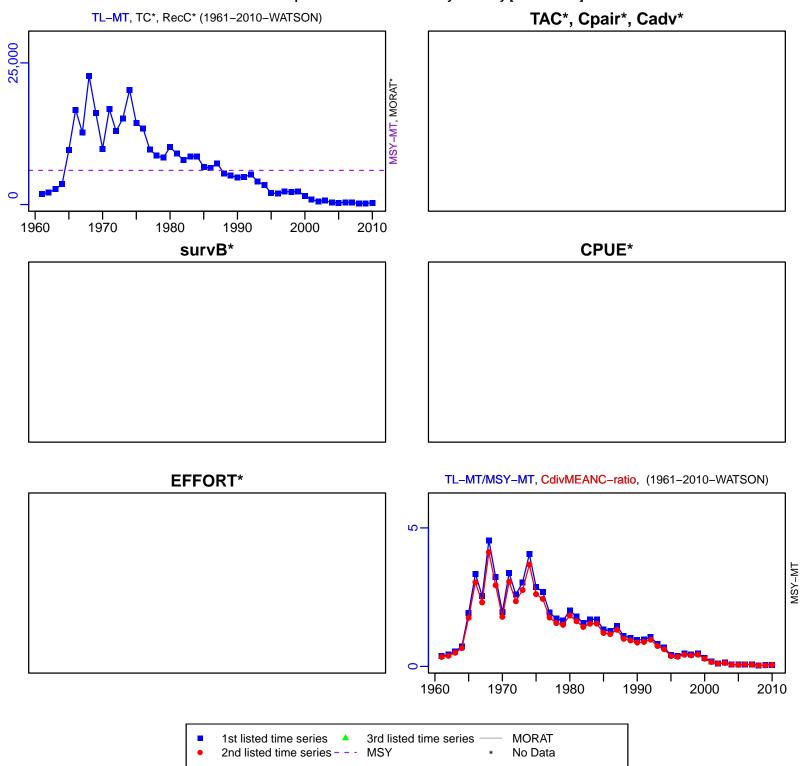
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	MSY-MT	2010	5113		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2010	15,800	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	250		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Spannor Restain	1 1044511611
opannor reorait	
opannor recordic	
opannor nooran	
opannor nooran	
opannor nooran	

◆ Start Year ◆ End Year \* No Data





### Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]

Metadata				
Scientific Name	Mactromeris polynyma			
Current Assess ID	DFO-QUE-ARCSURF4RST-1993-2014-OSGOOD			
Area Quebec and Gulf of St. Lawrence				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Quebec Region			
Asmts in RAM	2014			

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

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	-	-	-			
TL	TL-MT	2014	785			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

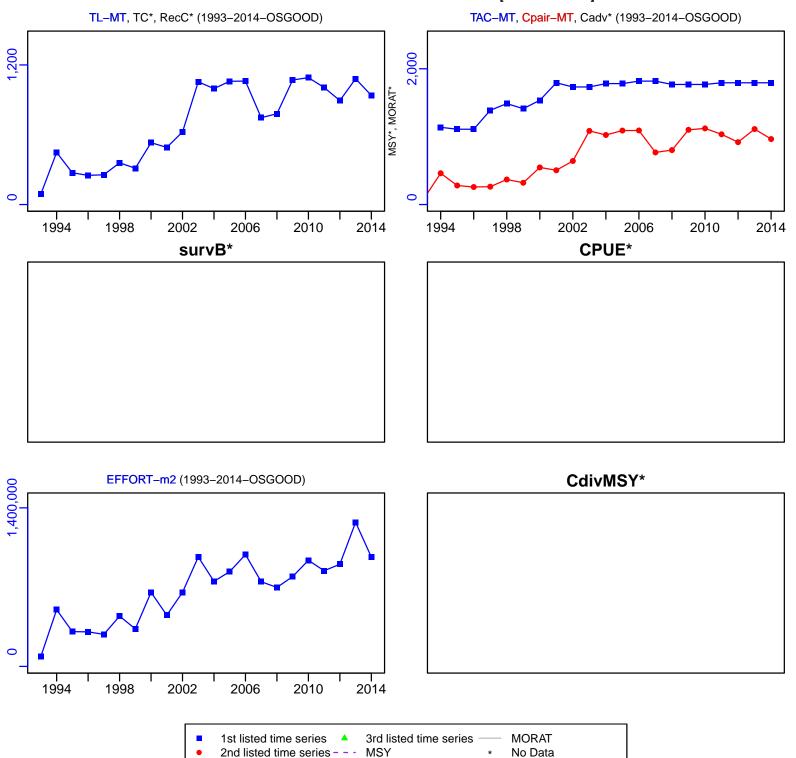
### Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

### Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]

TB*	SSB*
TN *	F*
ED*	Doow.ito*
ER*	Recruits*
■ Listed time series Ta MSY-based BRP Li	arget BRP — Rec-Est m BRP * No Data

### Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]



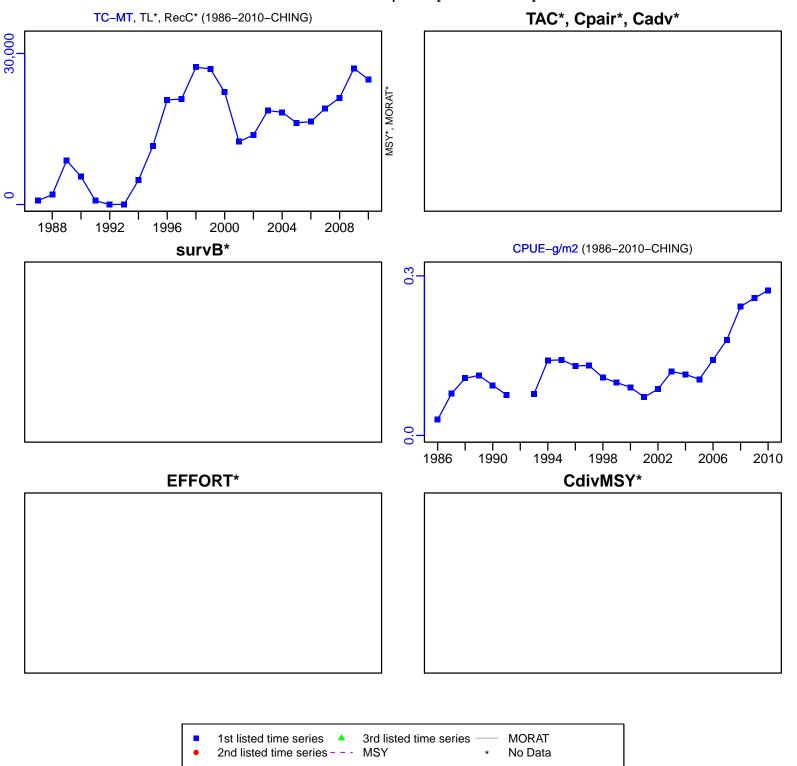
Metadata	
Scientific Name	Mactromeris polynyma
Current Assess ID	DFO-MAR-ARCSURFBANQ-1986-2010-CHING
Area	Banquereau
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2010

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2010	22,500		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	_	-		

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data



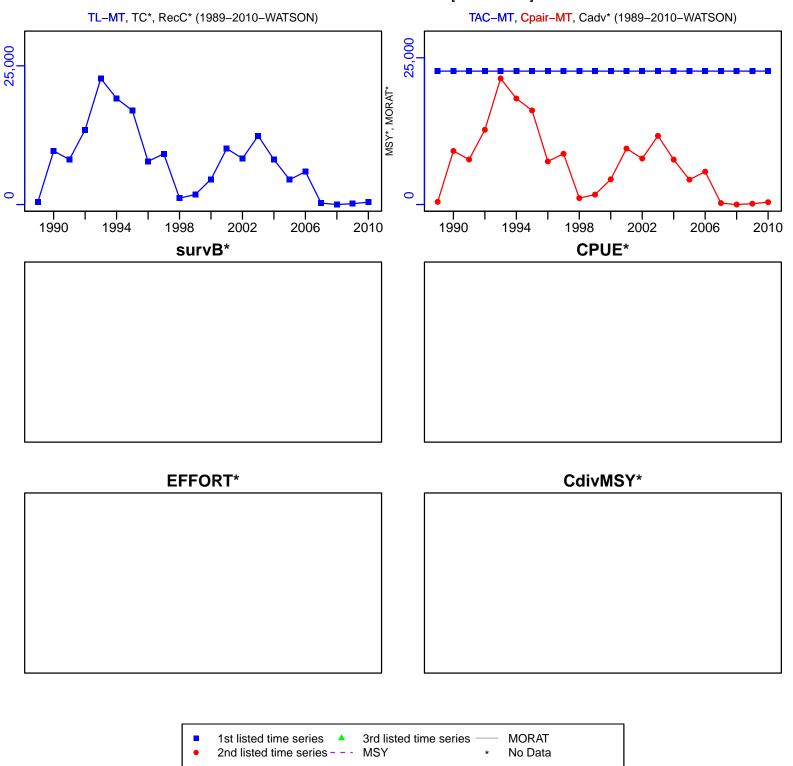
Metadata		
Scientific Name	Mactromeris polynyma	
Current Assess ID	DFO-ARCSURFGB-1989-2010-WATSON	
Area	Division 3LNO	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans	
Asmts in RAM	2010	

Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.08
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	346		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
	<b>-</b>
ER*	Recruits*
Listed time series Ta	arget BRP — Rec-Est



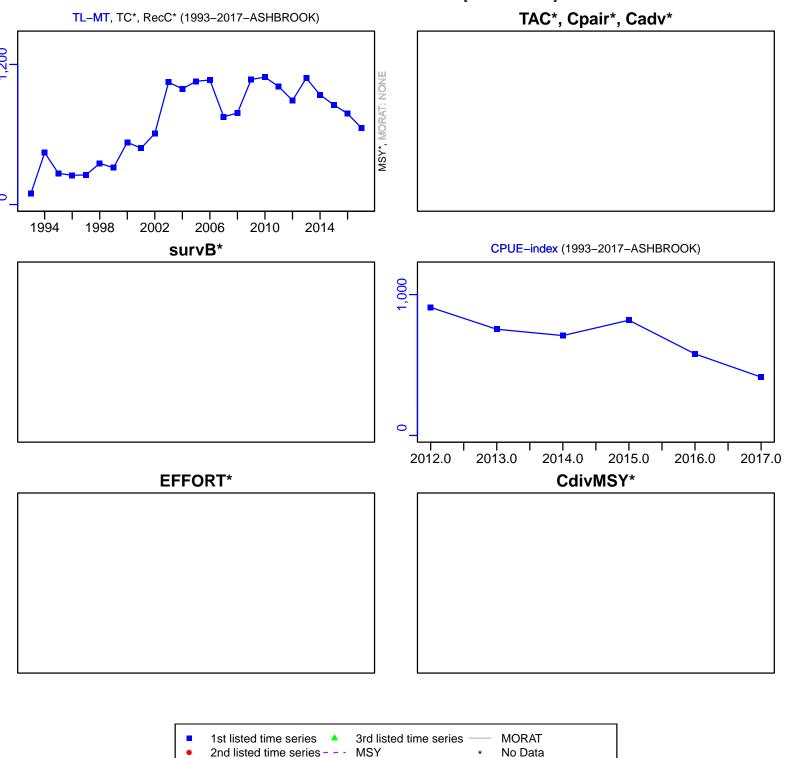
	Metadata
Scientific Name	Mactromeris polynyma
Current Assess ID	DFO-QUE-ARCSURFQCW-1993-2017-ASHBROOK
Area	Quebec Coastal Waters
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2011, 2017

F	Refere	ence Points	
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

		Time Series	}		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	552		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Spannor Restain	1 1044511611
opannor reorait	
opannor recordic	
opannor nooran	
opannor nooran	
opannor nooran	

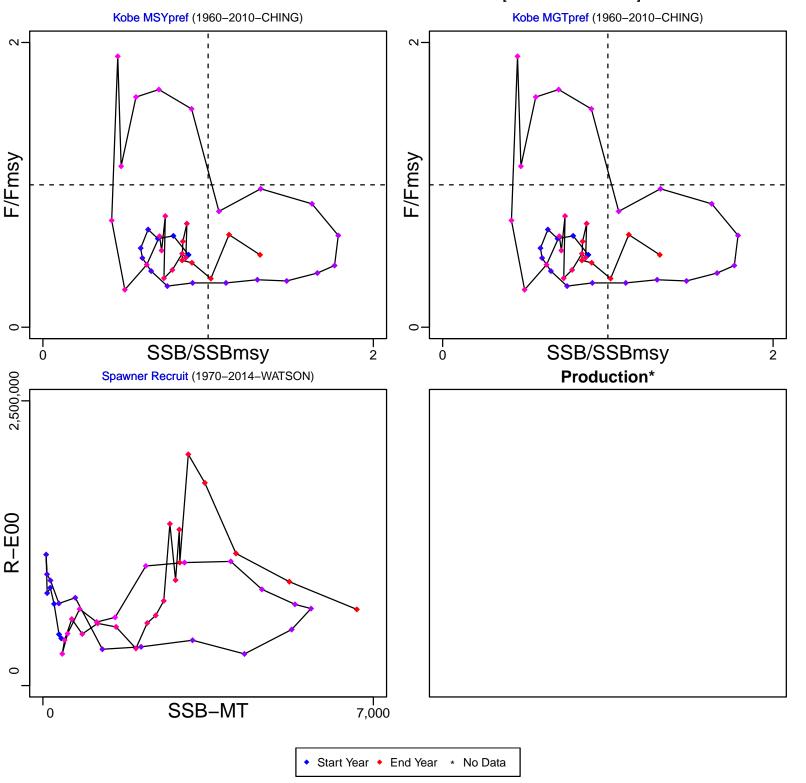
TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data

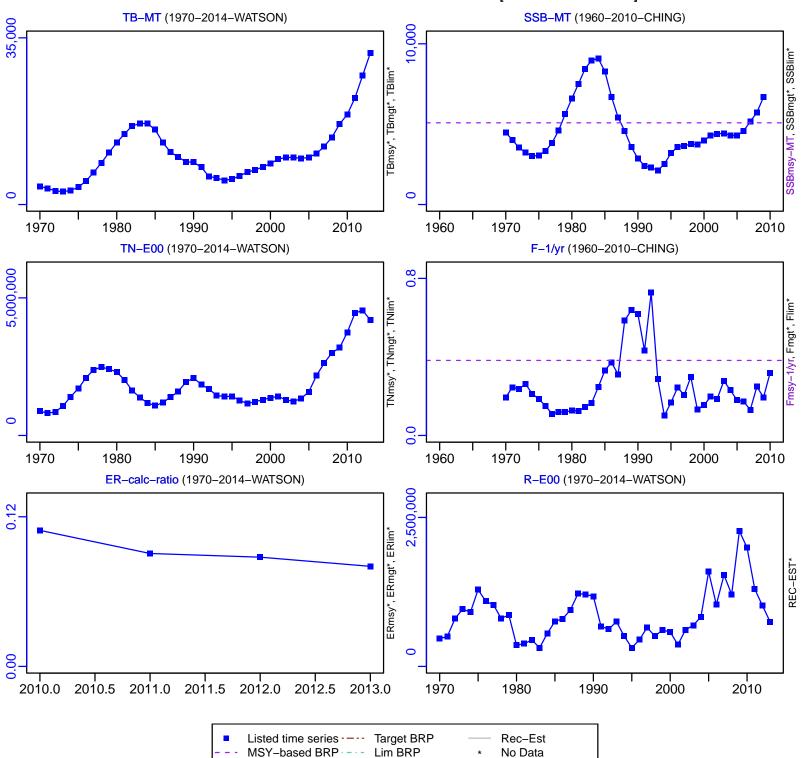


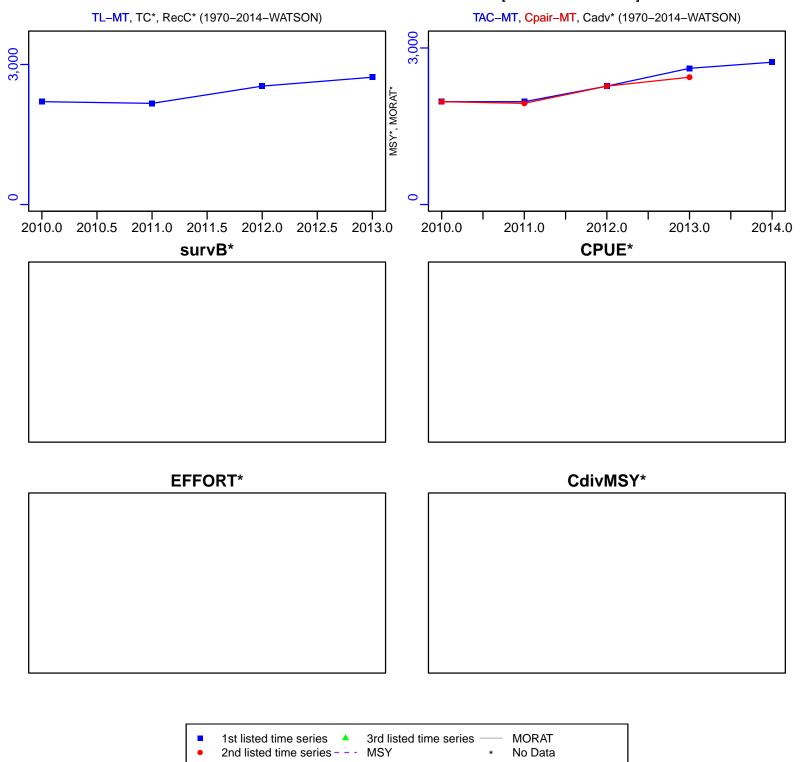
Metadata	
Scientific Name	Hippoglossus hippoglossus
Current Assess ID	DFO-ATHAL3NOPs4VWX5Zc-1970-2014-WATSON
Area	Scotian Shelf and Southern Grand Banks
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 2010

Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	SSBmsy-MT	2010	4900	
Fmsy	Fmsy-1/yr	2010	0.36	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

	Time	Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2014	31,800	-	-
SSB	SSB-MT	2014	6650	-	-
TN	TN-E00	2014	3,460,000	Both	-
R	R-E00	2014	669,000	-	-
F	F-1/yr	2010	0.3	-	-
ER	ER-calc-ratio	2014	0.072	-	-
TC	-	-	-		
TL	TL-MT	2014	2290		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2010	1.314		
F/Fmsy	F-1/yr/Fmsy-1/yr	2010	0.833		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		







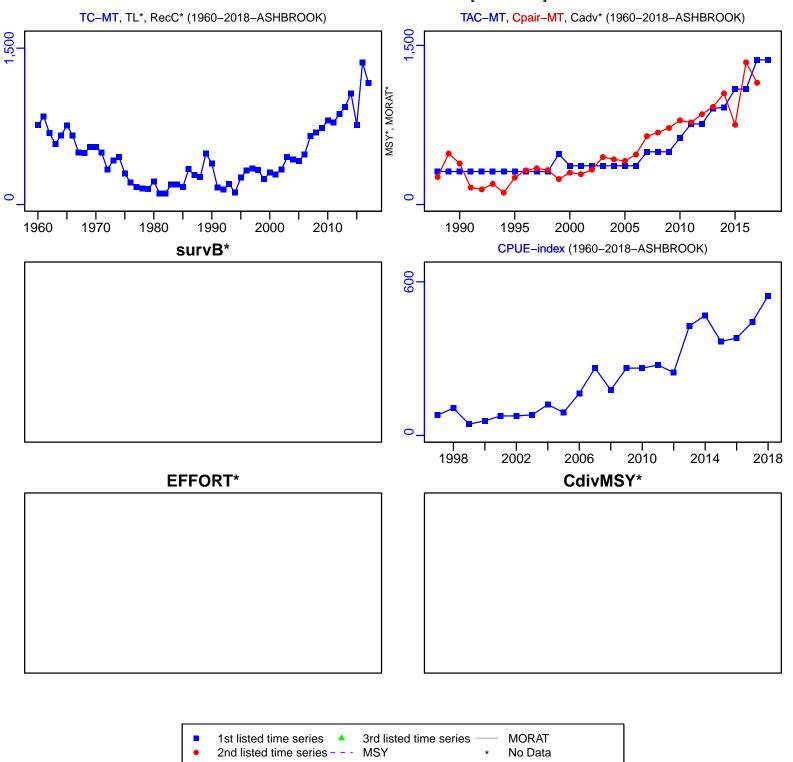
	Metadata
Scientific Name	Hippoglossus hippoglossus
Current Assess ID	DFO-QUE-ATHAL4RST-1960-2018-ASHBROOK
Area	Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2018

F	Refere	ence Points	
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

		Time Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	1095		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ED*	Doowito*
ER*	Recruits*
	J
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



Metadata		
Scientific Name	Dipturus laevis	
Current Assess ID	DFO-MAR-BSKATCANATL-1970-1987-PREFONTAINE	
Area	Canadian Atlantic Ocean	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Maritimes Region	
Asmts in RAM	1987	

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

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

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
I IN	<u>r</u>
ER*	Recruits*
LIK	
■ Listed time series Ta	arget BRP — Rec-Est
■ Listed time series Ta MSY-based BRP Li	im BRP * No Data

TC*, TL*, RecC*	TAC*, Cpair*, Cadv*
survB*	CPUE*
FFF0DT*	
EFFORT*	CdivMSY*
■ 1st listed time series ▲ 3rd	listed time series — MORAT

No Data

2nd listed time series - - - MSY

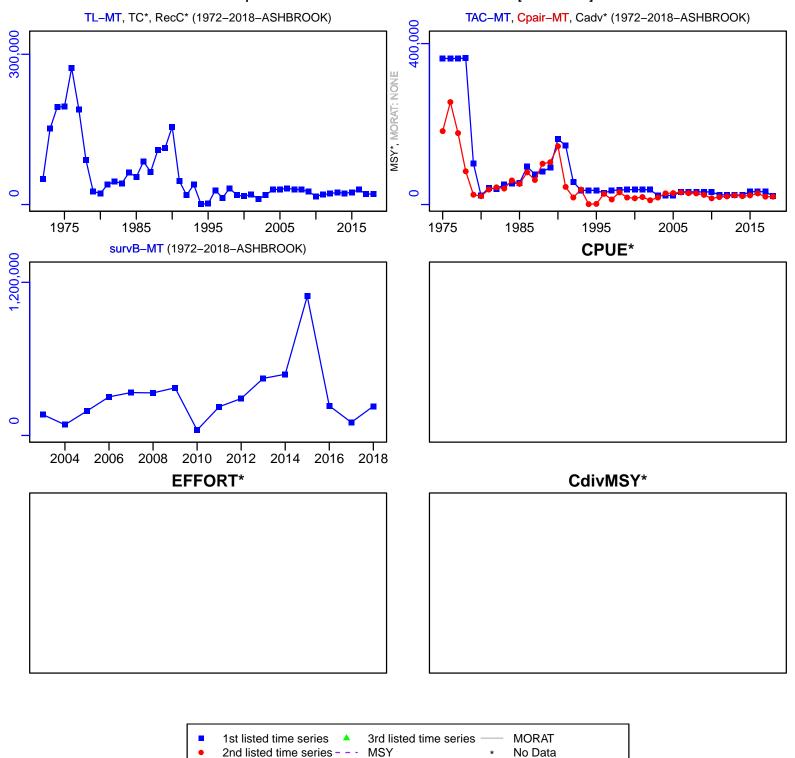
Metadata		
Scientific Name	Mallotus villosus	
Current Assess ID	DFO-CAPE2J3KL-1972-2018-ASHBROOK	
Area	Southern Labrador-Eastern Newfoundland	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans	
Asmts in RAM	2018	

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	18,888		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Spannor Restain	1 1044511611
opannor reorait	
opannor recordic	
opannor nooran	
opannor nooran	
opannor nooran	

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data



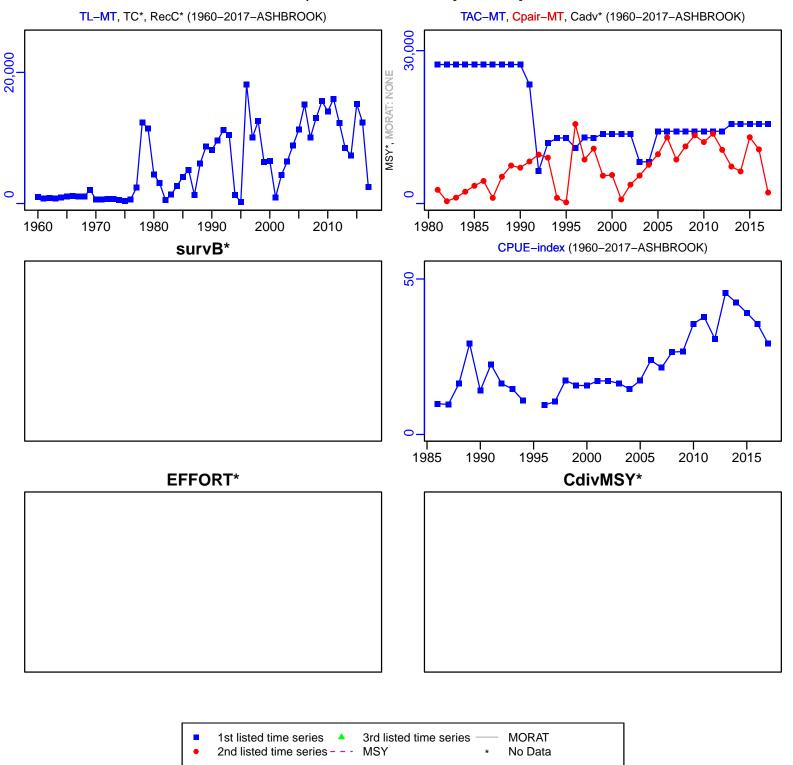
Metadata			
Scientific Name	Mallotus villosus		
Current Assess ID	DFO-QUE-CAPE4RST-1960-2017-ASHBROOK		
Area	Gulf of St. Lawrence		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Quebec Region		
Asmts in RAM	2012, 2010, 2017		

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	1973		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Opawner Recruit	l

TB*	SSB*
TN *	F*
ED*	Doowito*
ER*	Recruits*
	J
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



# Atlantic cod NAFO 1ABCDE [COD1ABCDE]

Metadata				
Scientific Name Gadus morhua				
Current Assess ID	NWWG-COD1ABCDE-1952-2016-ICESIMP2018			
Area	NAFO 1ABCDE			
Management Authority	International Council for the Exploration of the Sea			
Assessor	North-Western Working Group			
Asmts in RAM	2015, 2016			

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	3740		
TL	TL-MT	2015	4860		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

## Atlantic cod NAFO 1ABCDE [COD1ABCDE]

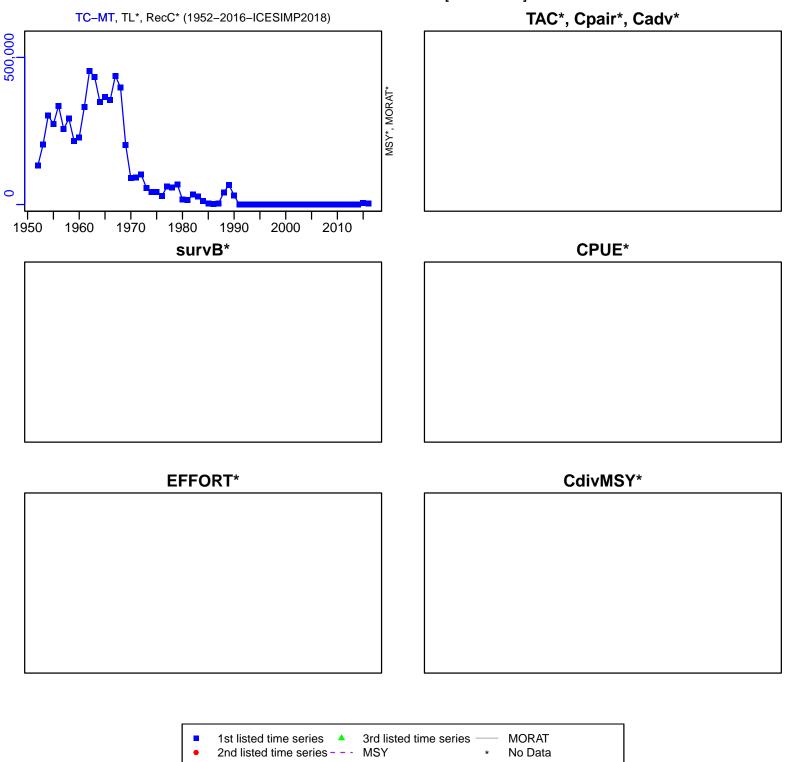
Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
	L

◆ Start Year ◆ End Year \* No Data

## Atlantic cod NAFO 1ABCDE [COD1ABCDE]

TB*	SSB*
TN *	F*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data

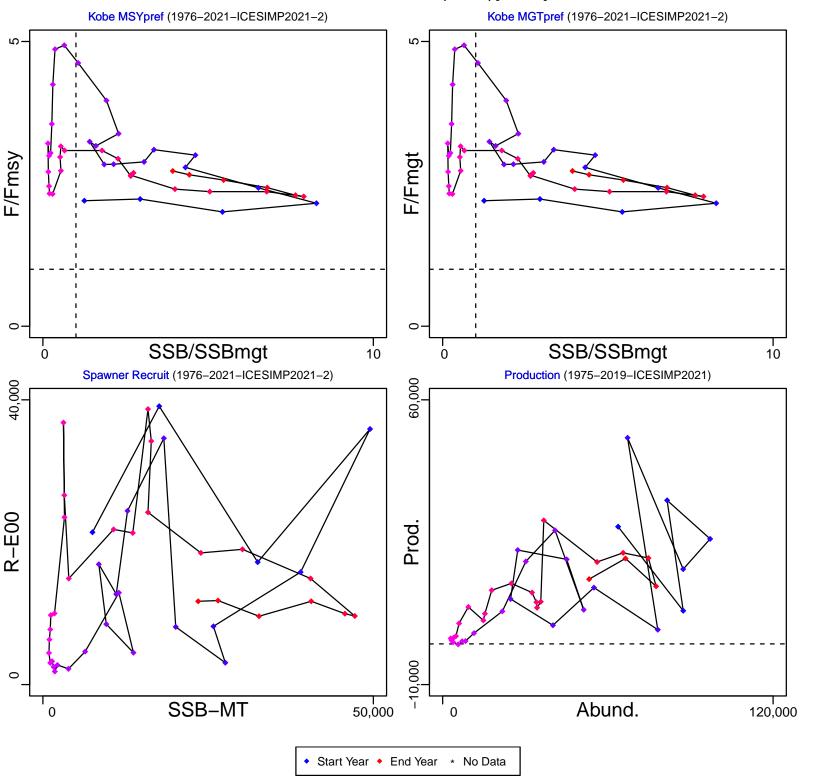
## Atlantic cod NAFO 1ABCDE [COD1ABCDE]

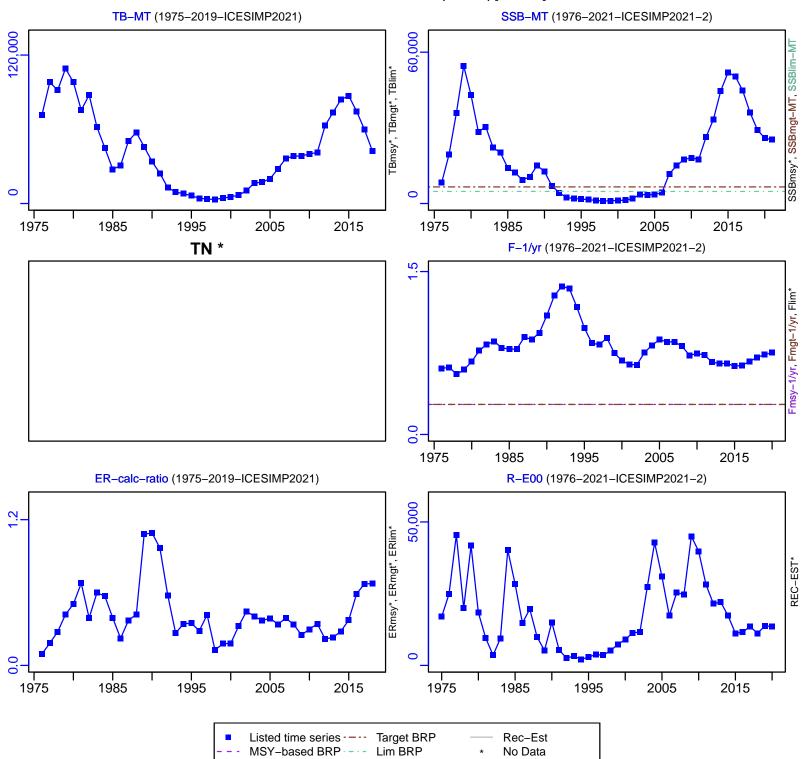


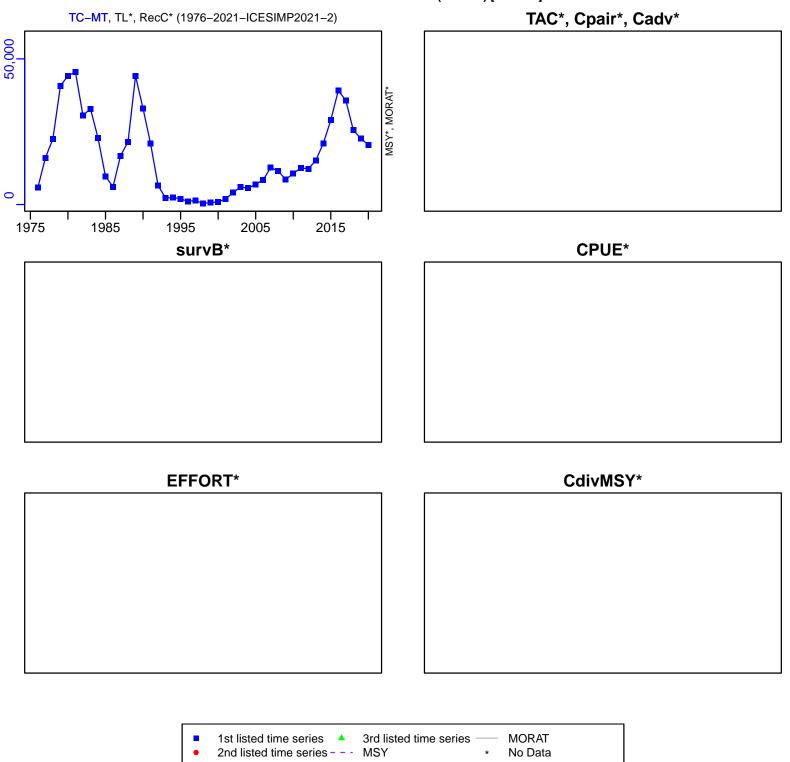
Metadata		
Scientific Name Gadus morhua		
Current Assess ID	NWWG-COD1IN-1976-2021-ICESIMP2021-2	
Area NAFO Subarea 1 (inshore)		
Management Authority	International Council for the Exploration of the Sea	
Assessor	North-Western Working Group	
Asmts in RAM	2016, 2016, 2018, 2019, 2020, 2021	

Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	Fmsy-1/yr	2021	0.27	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2021	5980	
Fmgt	Fmgt-1/yr	2021	0.27	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2021	4350	
Flim	-	-	-	
ERlim	-	-	-	

	Time Series				
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2019	37,899	-	-
SSB	SSB-MT	2021	23,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	11,700	-	1
F	F-1/yr	2021	0.736	-	-
ER	ER-calc-ratio	2019	0.588	-	-
TC	TC-MT	2021	17,900		
TL	TL-MT	2020	19,800		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	2.726		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	3.846		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	2.726		
ER/ERmgt	-	-	-		



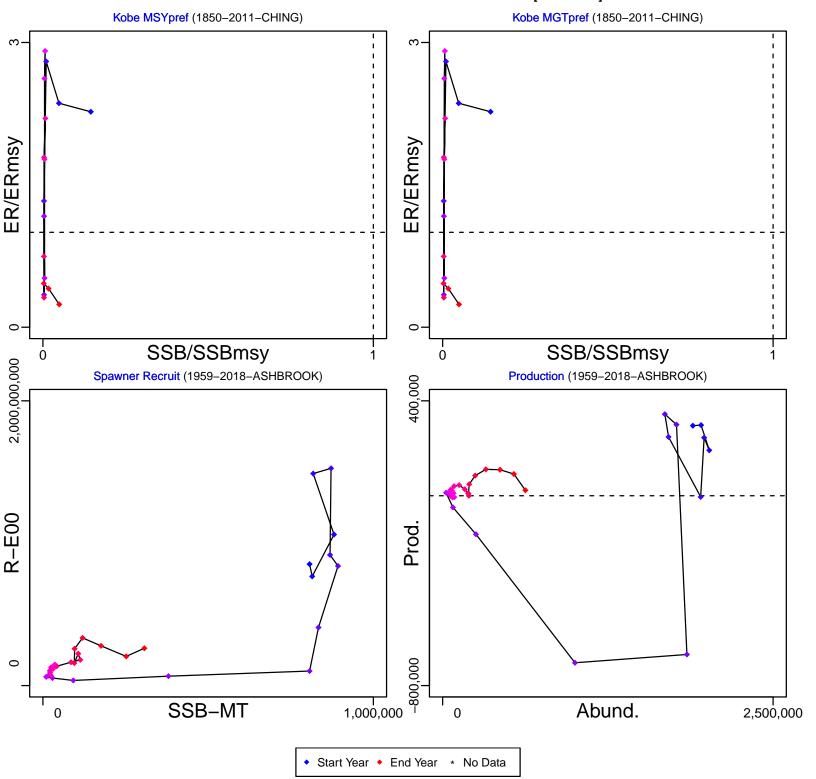


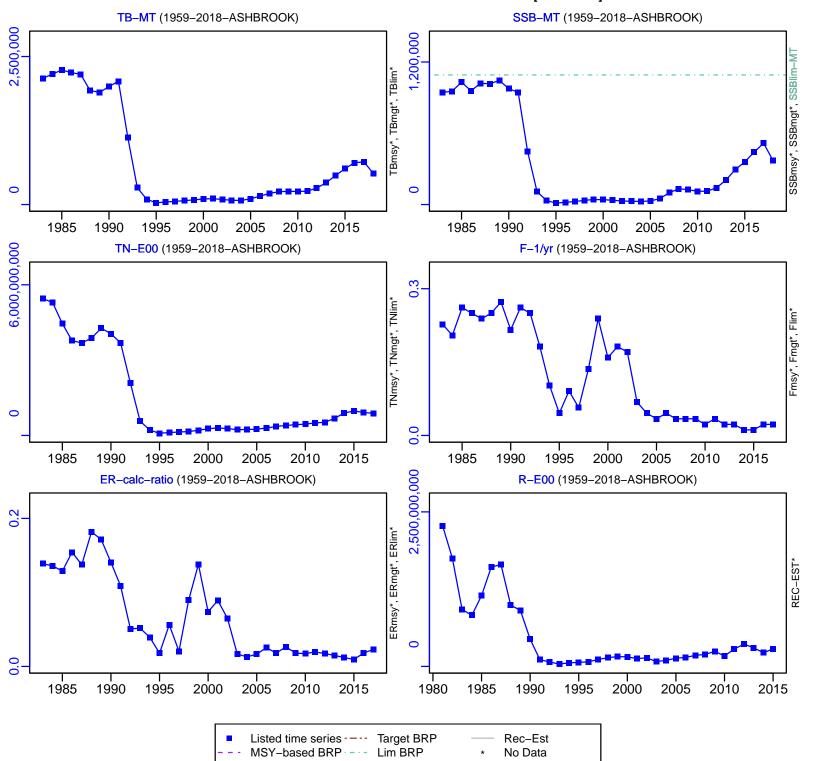


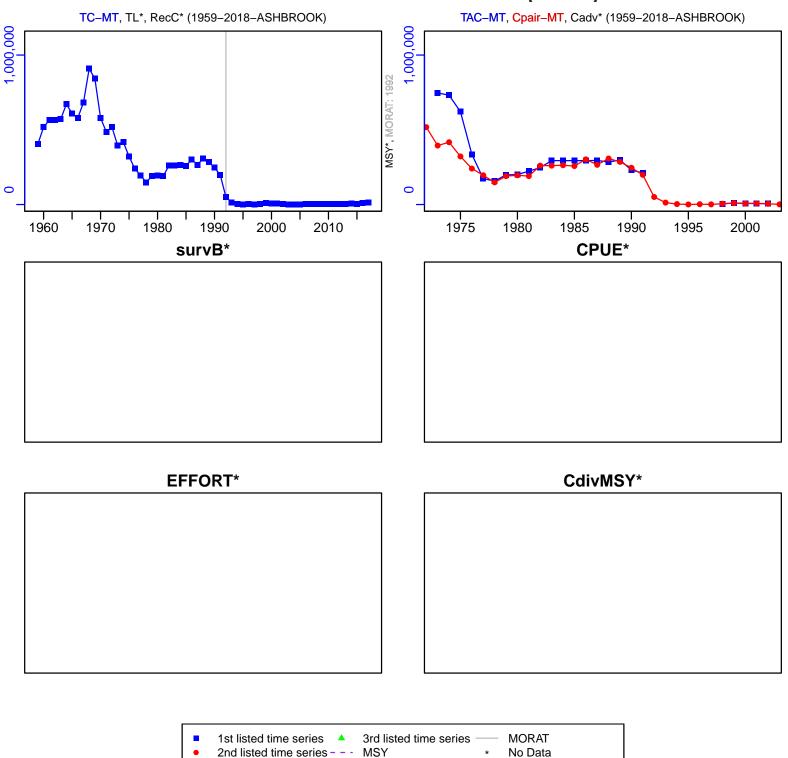
Metadata		
Scientific Name	Gadus morhua	
Current Assess ID	DFO-NFLD-COD2J3KL-1959-2018-ASHBROOK	
Area Southern Labrador-Eastern Newfoundland		
Management Authority Department of Fisheries and Oceans, Canada national managemen		
Assessor	Ssessor Department of Fisheries and Oceans - Newfoundland Region	
Asmts in RAM	2014, 2011, 2018	

Reference Points					
Туре	ID Asmt Year		Value		
TBmsy	-	-	-		
SSBmsy	SSBmsy-MT	2011	$1 \times 10^{6}$		
Fmsy	-	-	-		
ERmsy	ERmsy-ratio	2011	0.1		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	-	-	-		
TBlim	-	-	-		
SSBlim	SSBlim-MT	2018	932,432		
Flim	-	-	-		
ERlim	-	-	-		

	Time Series				
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2018	467,000	Both	2+
SSB	SSB-MT	2018	315,000	Both	5+
TN	TN-E00	2018	$7.95 \times 10^{8}$	Both	2+
R	R-E00	2018	$2.62 \times 10^{8}$	Both	2
F	F-1/yr	2018	0.02	-	14-May
ER	ER-calc-ratio	2018	0.02	-	-
TC	TC-MT	2018	13,030		
TL	TL-MT	2014	4580		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	0.066		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	0.241		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





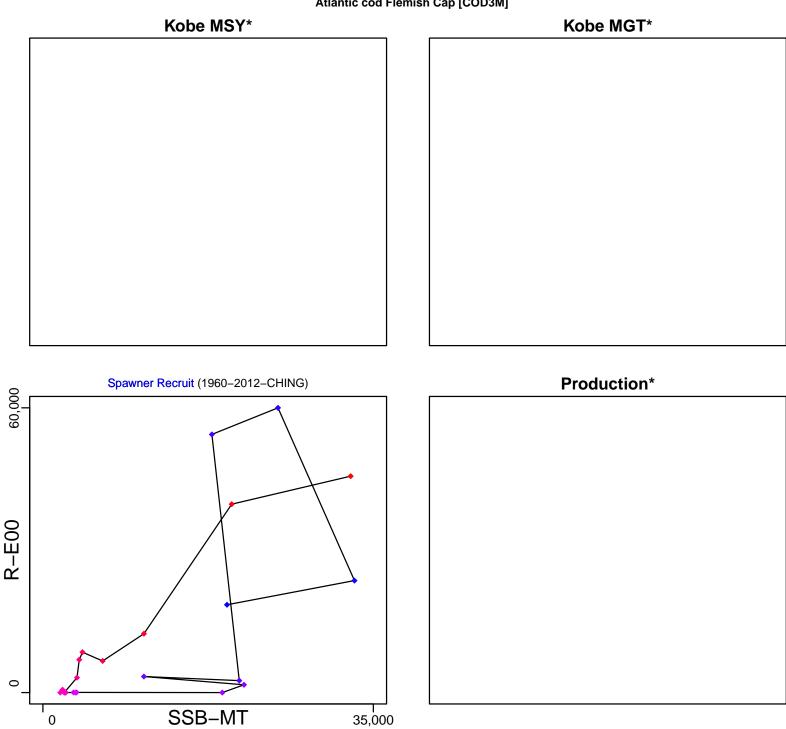


## Atlantic cod Flemish Cap [COD3M]

Metadata		
Scientific Name	Gadus morhua	
Current Assess ID	NAFO-SC-COD3M-1960-2012-CHING	
Area Flemish Cap		
Management Authority	Northwest Atlantic Fisheries Organization	
Assessor	NAFO Scientific Council	
Asmts in RAM	2012	

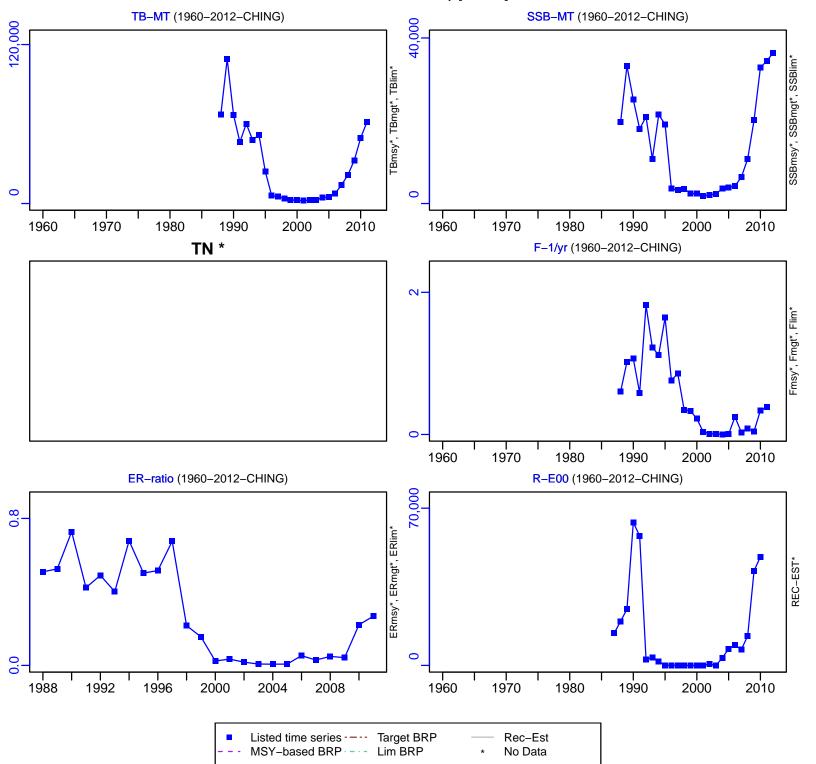
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2012	58,800	-	-
SSB	SSB-MT	2012	36,100	-	-
TN	-	-	-	-	-
R	R-E00	2012	45,600	-	-
F	F-1/yr	2012	0.327	-	-
ER	ER-ratio	2012	0.236	-	-
TC	TC-MT	2012	13,900		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

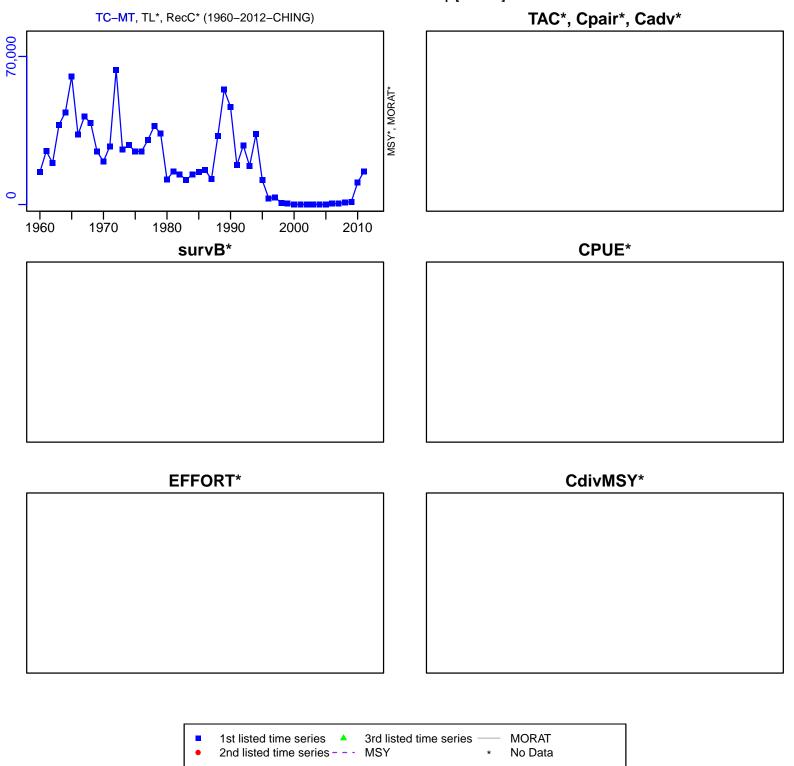


Start Year • End Year \* No Data

### Atlantic cod Flemish Cap [COD3M]



### Atlantic cod Flemish Cap [COD3M]



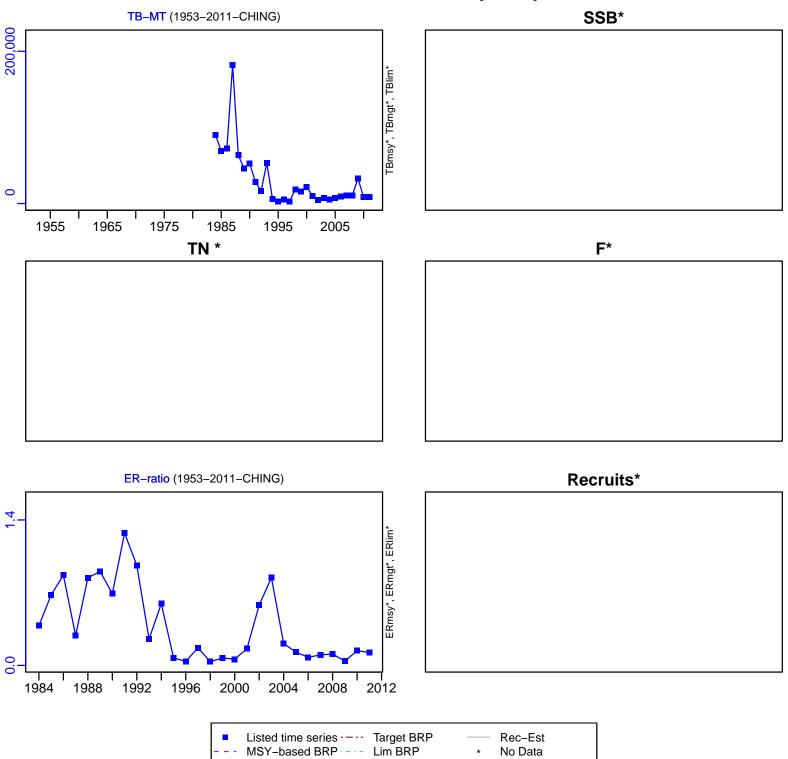
Metadata		
Scientific Name	Gadus morhua	
Current Assess ID	NAFO-SC-COD3NO-1953-2011-CHING	
Area	Southern Grand Banks	
Management Authority Northwest Atlantic Fisheries Organization		
Assessor	NAFO Scientific Council	
Asmts in RAM	2011	

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

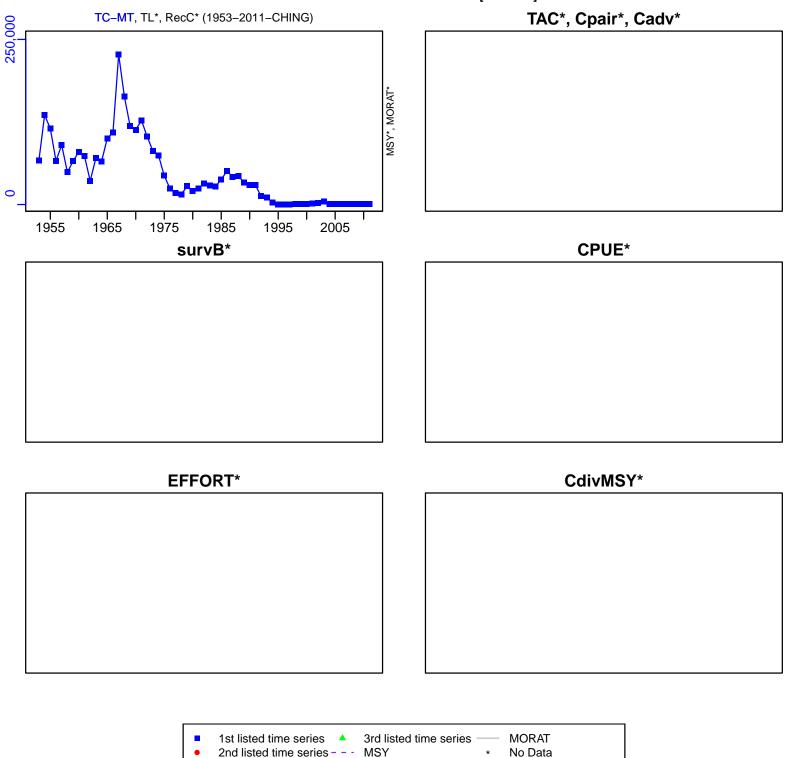
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2011	7570	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2011	0.108	-	-
TC	TC-MT	2011	819		,
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data



No Data

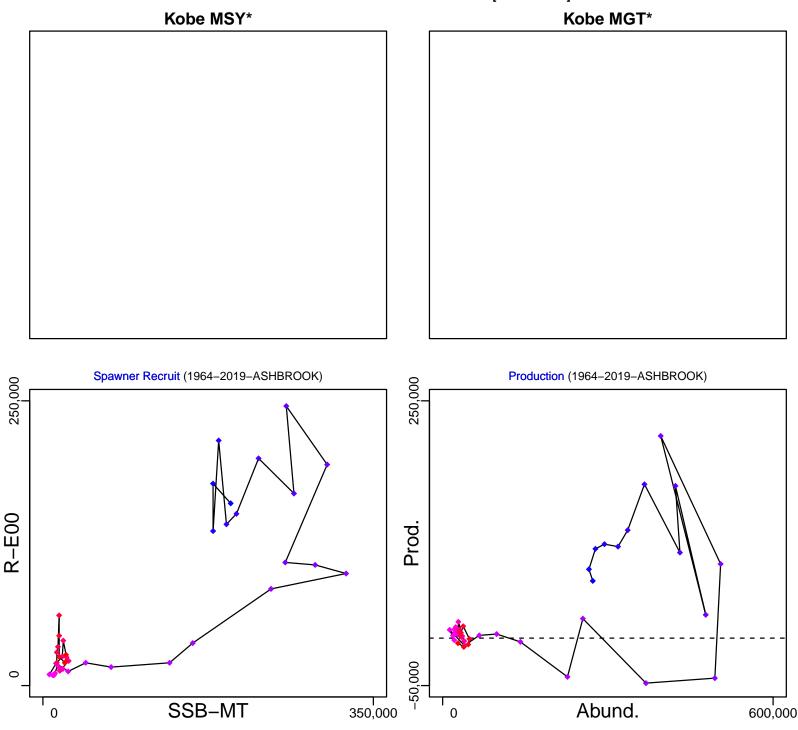


## Atlantic cod Northern Gulf of St. Lawrence [COD3Pn4RS]

Metadata				
Scientific Name	Gadus morhua			
Current Assess ID	DFO-QUE-COD3Pn4RS-1964-2019-ASHBROOK			
Area Northern Gulf of St. Lawrence				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Quebec Region			
Asmts in RAM	2015, 2012, 2019			

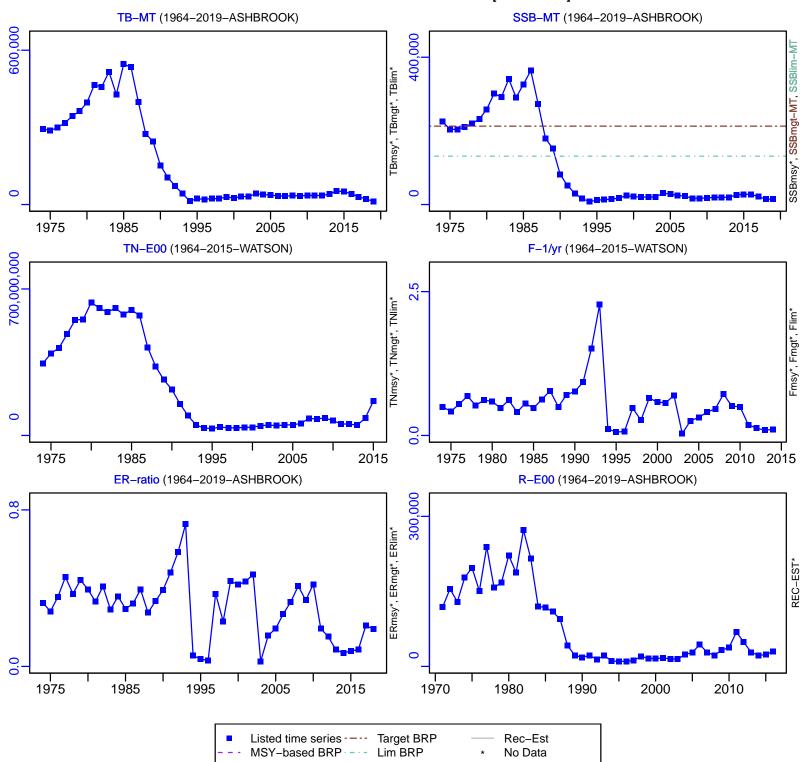
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	SSBmgt-MT	2019	188,000		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2019	0.2		
TBlim	-	-	-		
SSBlim	SSBlim-MT	2019	116,000		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2019	11,467	-	3+
SSB	SSB-MT	2019	12,921	-	3+
TN	TN-E00	2015	$1.44 \times 10^{8}$	-	3+
R	R-E00	2019	27,027	-	3
F	F-1/yr	2015	0.09	-	7 to 9
ER	ER-ratio	2019	0.179	-	9-Jul
TC	-	-	-		
TL	TL-MT	2019	2496		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	•	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2019	0.069		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

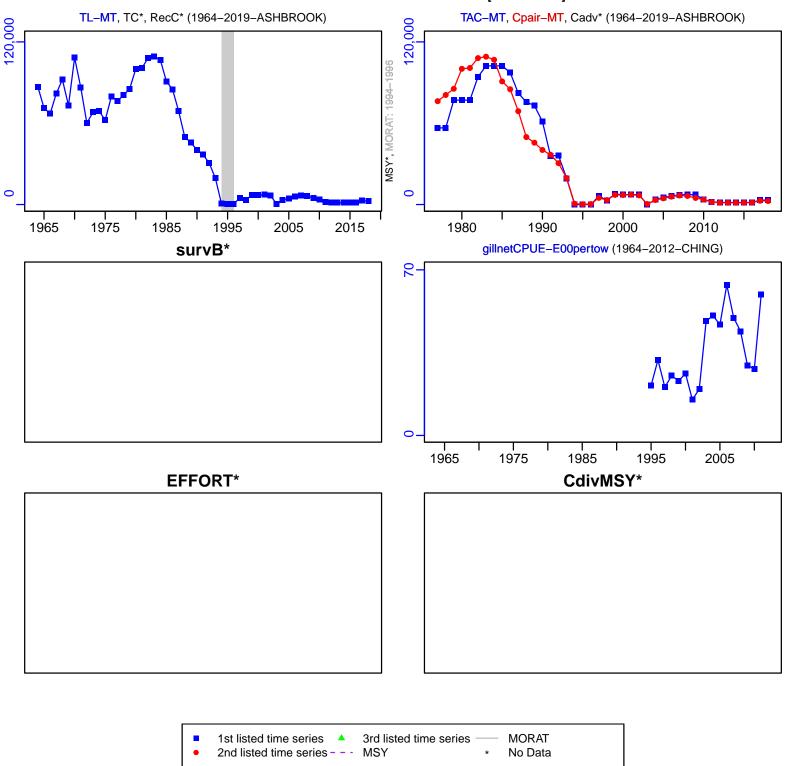


Start Year → End Year → No Data

### Atlantic cod Northern Gulf of St. Lawrence [COD3Pn4RS]



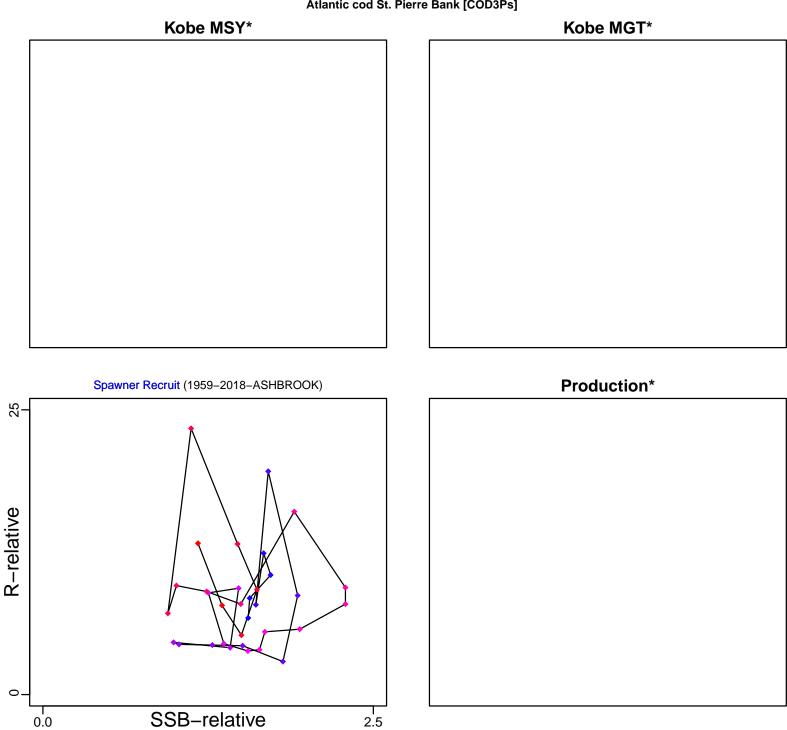
### Atlantic cod Northern Gulf of St. Lawrence [COD3Pn4RS]



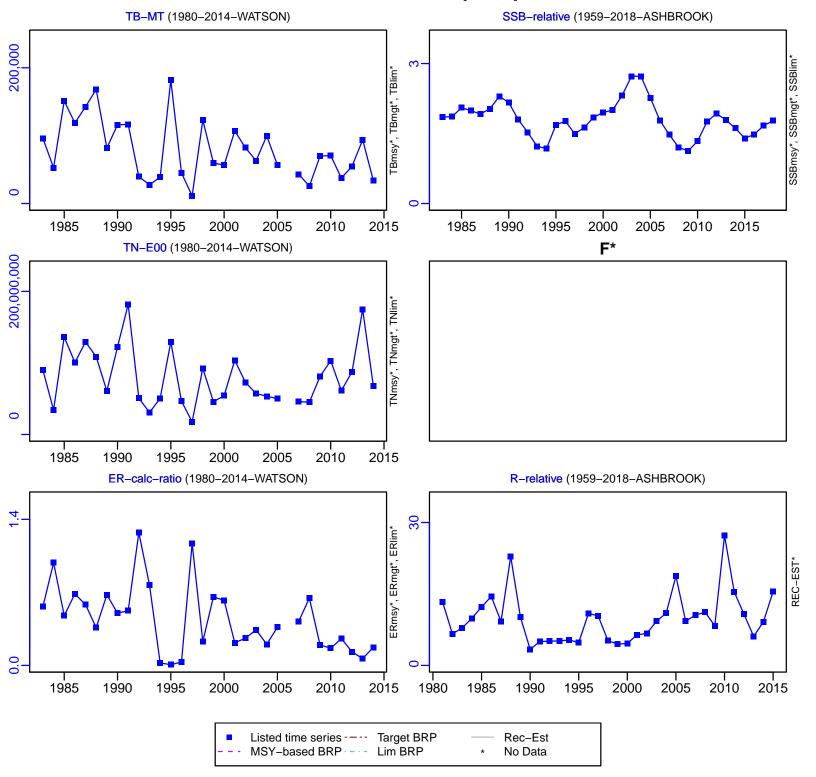
Metadata			
Scientific Name	Gadus morhua		
Current Assess ID DFO-NFLD-COD3Ps-1959-2018-ASHBROOK			
Area St. Pierre Bank			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor Department of Fisheries and Oceans - Newfoundland Region			
Asmts in RAM	2014, 2011, 2018		

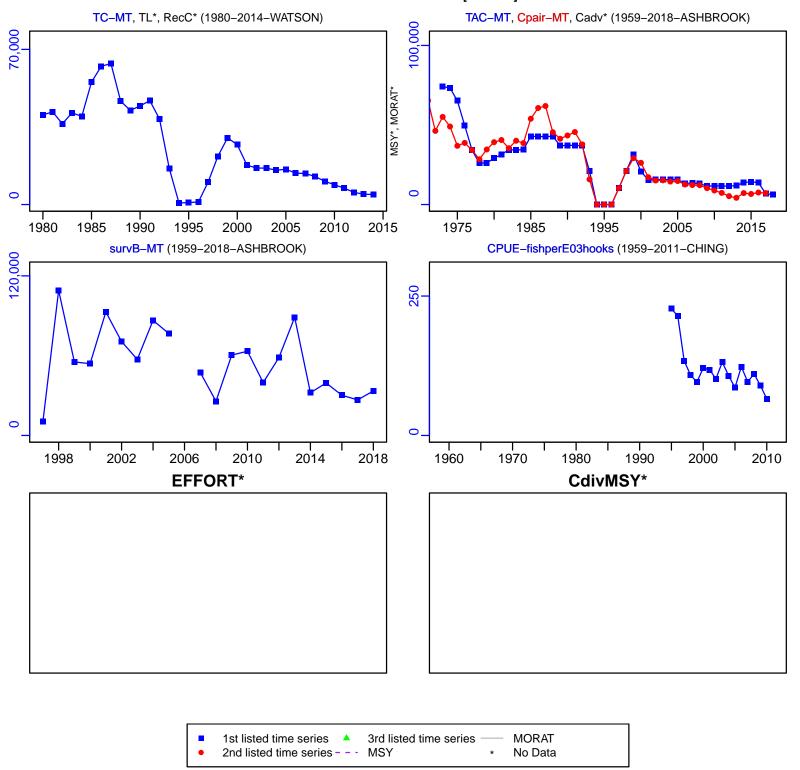
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2014	27,600	-	-
SSB	SSB-relative	2018	1.489	-	-
TN	TN-E00	2014	58,100,000	-	-
R	R-relative	2018	13	-	1
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.152	-	-
TC	TC-MT	2014	4190		
TL	TL-MT	2018	6866		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSBdivSSBmgt-dimensionless	2014	1.6		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Start Year • End Year \* No Data



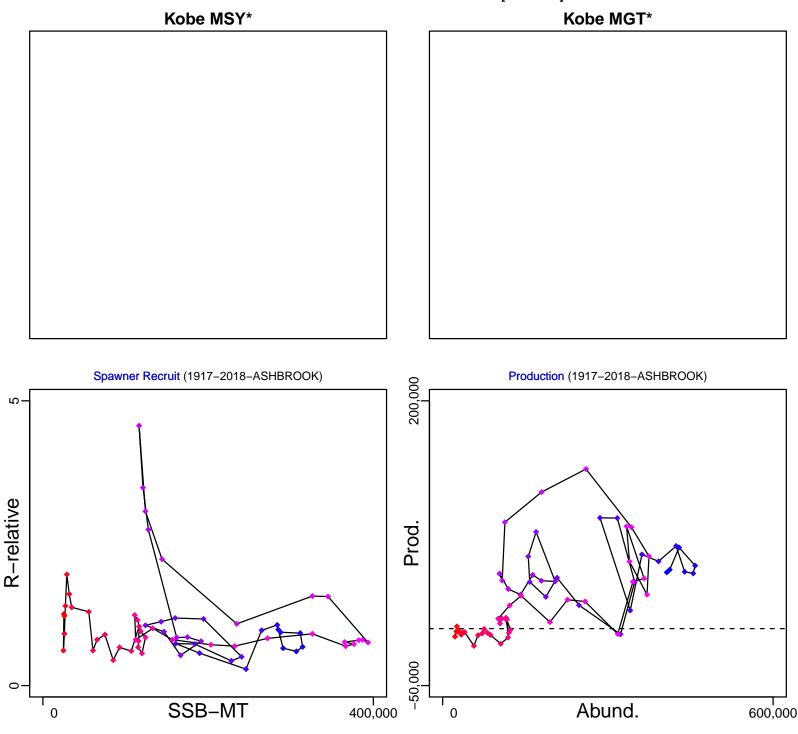


# Atlantic cod Southern Gulf of St. Lawrence [COD4TVn]

Metadata				
Scientific Name	Gadus morhua			
Current Assess ID	DFO-SG-COD4TVn-1917-2018-ASHBROOK			
Area Southern Gulf of St. Lawrence				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor Department of Fisheries and Oceans - Southern Gulf Region				
Asmts in RAM	2015, 2018, 2011			

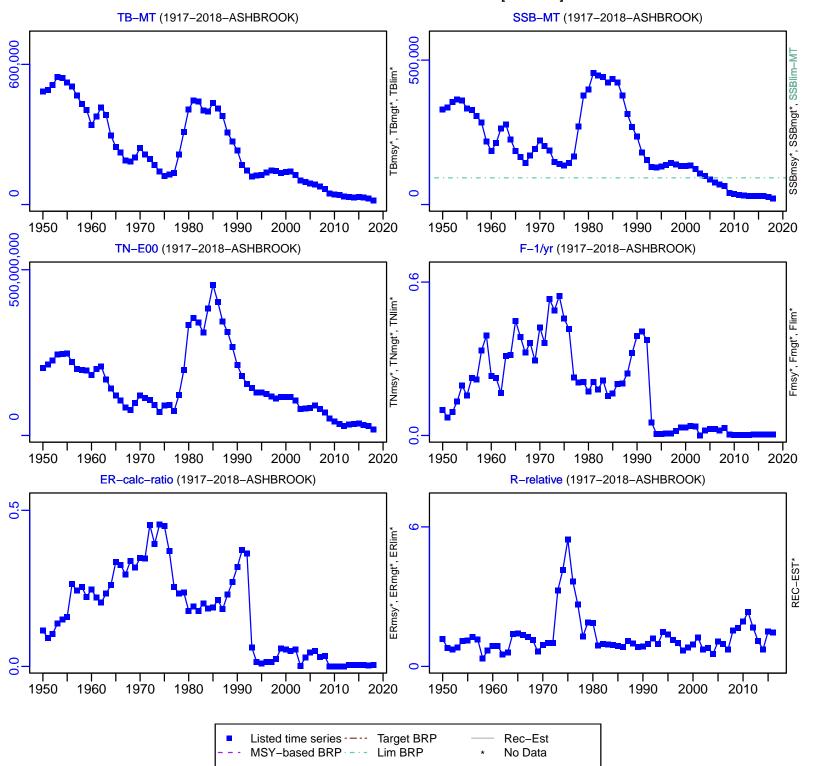
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
M	-	-	-		
TBlim	-	-	-		
SSBlim	SSBlim-MT	2018	80,000		
Flim	-	-	-		
ERlim	-	-	-		

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2018	15,236	-	5+	
SSB	SSB-MT	2018	18,322	-	-	
TN	TN-E00	2018	17,877,070	-	5+	
R	R-relative	2018	1.224	-	2	
F	F-1/yr	2018	0.004	-	8-May	
ER	ER-calc-ratio	2018	0.004	-	-	
TC	TC-MT	2018	59			
TL	TL-MT	2015	114			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

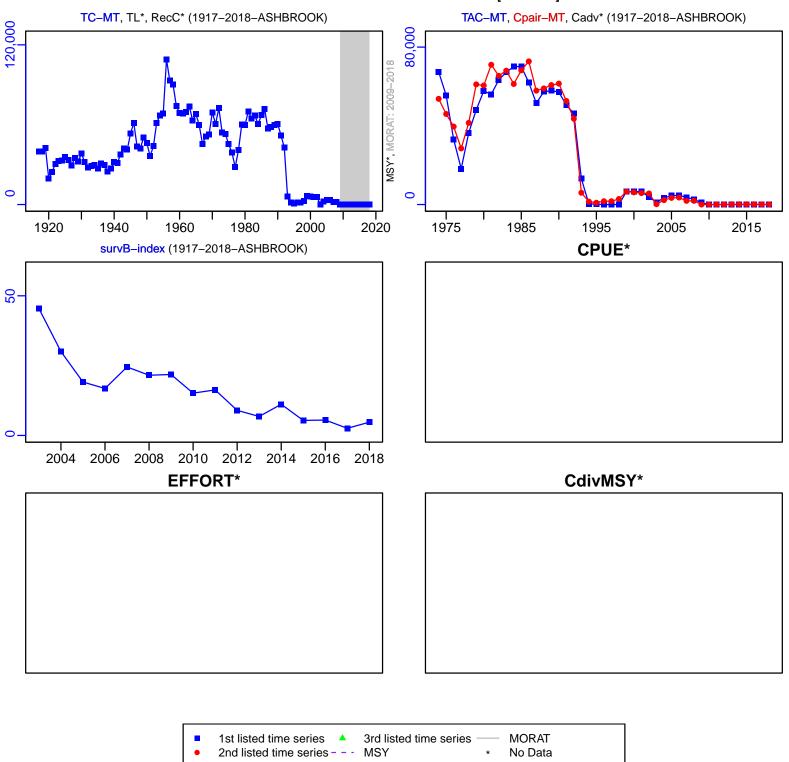


Start Year • End Year • No Data

#### Atlantic cod Southern Gulf of St. Lawrence [COD4TVn]



### Atlantic cod Southern Gulf of St. Lawrence [COD4TVn]



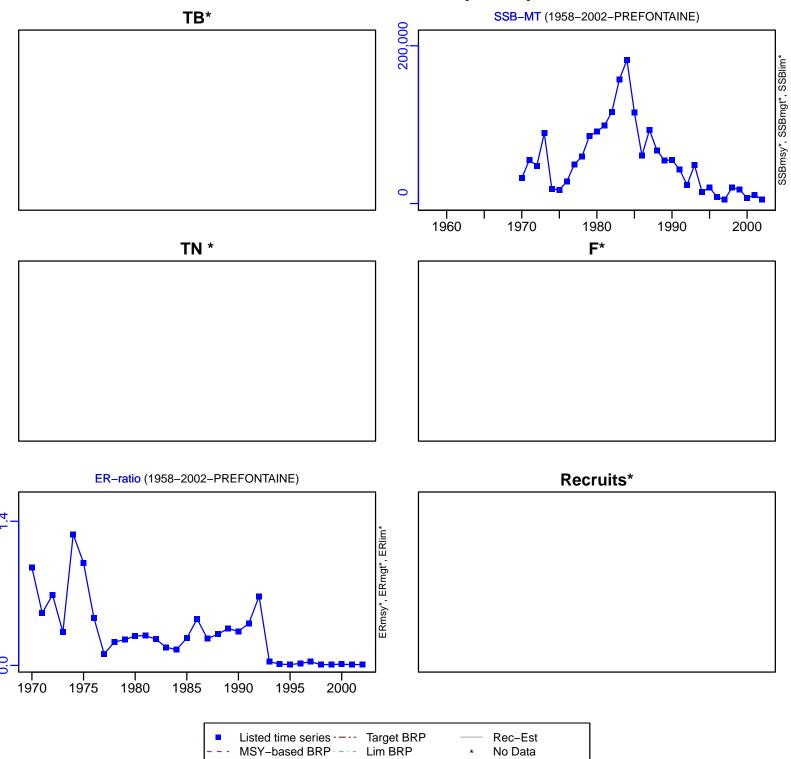
Metadata			
Scientific Name	Gadus morhua		
Current Assess ID	DFO-MAR-COD4VsW-1958-2002-PREFONTAINE		
Area	Eastern Scotian Shelf		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2002		

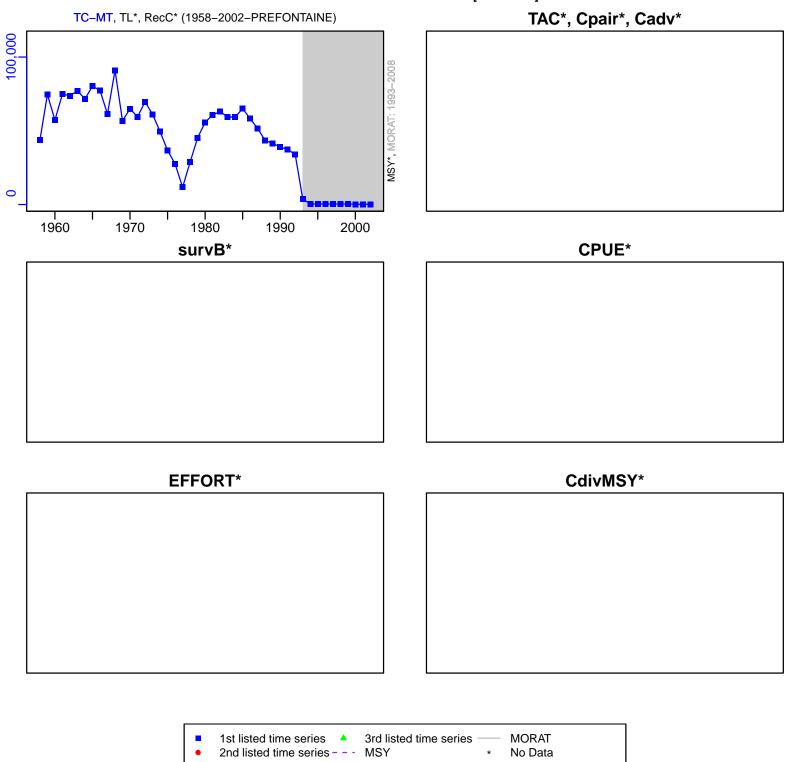
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2002	4720	-	4+
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2002	0.008	-	-
TC	TC-MT	2002	83		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Spawner Redruit	1 Todastion

◆ Start Year ◆ End Year \* No Data



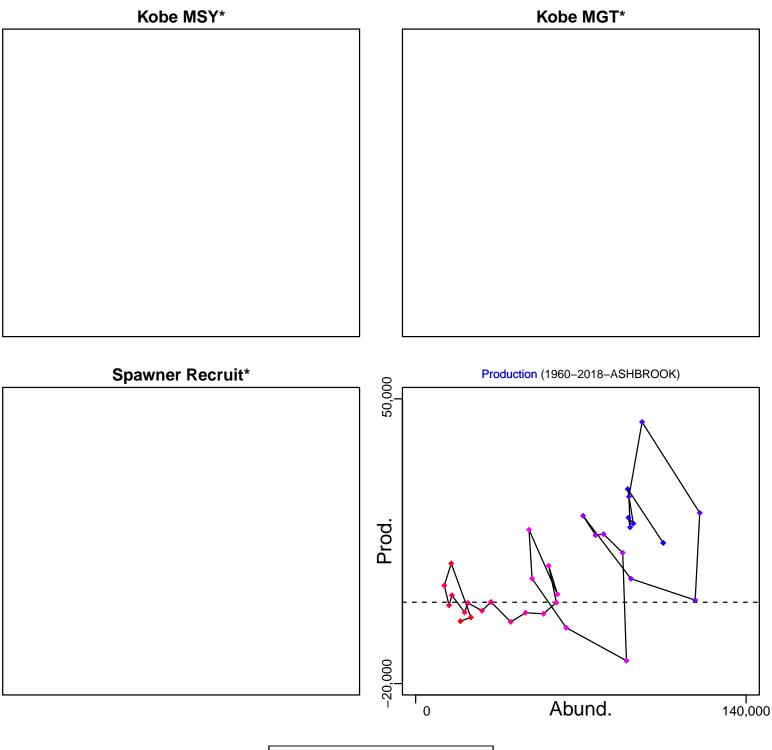


# Atlantic cod Western Scotian Shelf, Bay of Fundy and Gulf of Maine [COD4X5Yb]

Metadata			
Scientific Name	Gadus morhua		
Current Assess ID	DFO-MAR-COD4X5Yb-1960-2018-ASHBROOK		
Area	Western Scotian Shelf, Bay of Fundy and Gulf of Maine		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2009, 2018		

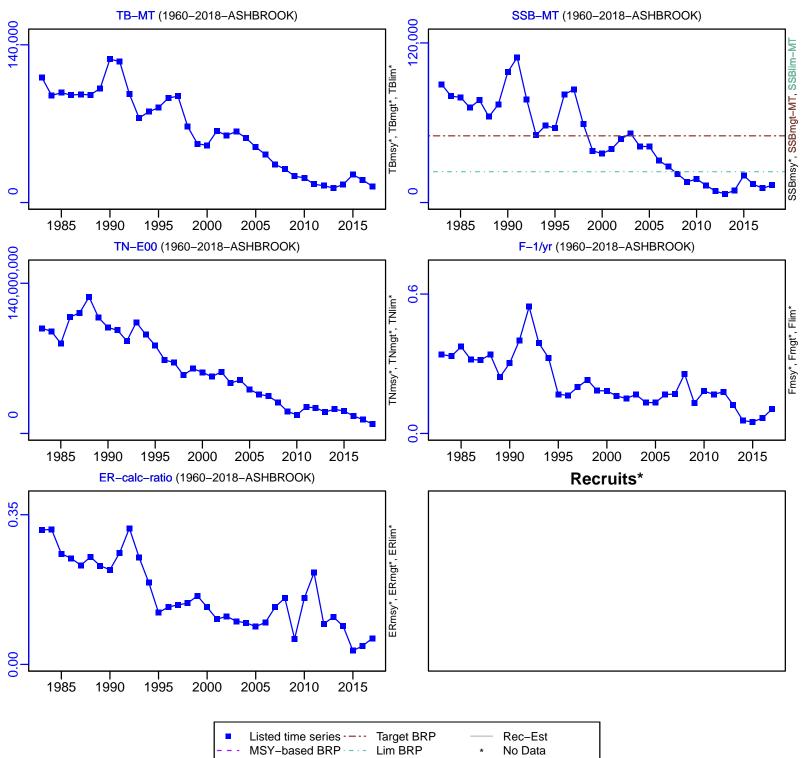
Reference Points				
Туре	Type ID		Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2018	48,000	
Fmgt	Fmgt-1/yr	2009	0.2	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	M-1/yr	2018	1.57	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2018	22,193	
Flim	-	-	-	
ERlim	-	-	-	

	Time Series				
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2018	13,588	-	1-7+
SSB	SSB-MT	2018	12,491	-	4+
TN	TN-E00	2018	8,028,000	-	1-7+
R	-	-	-	-	-
F	F-1/yr	2018	0.088	-	7-Apr
ER	ER-calc-ratio	2018	0.055	-	-
TC	-	-	-		
TL	TL-MT	2018	746		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.26		
F/Fmgt	F-1/yr/Fmgt-1/yr	2009	1.5		
ER/ERmgt	-	-	-		

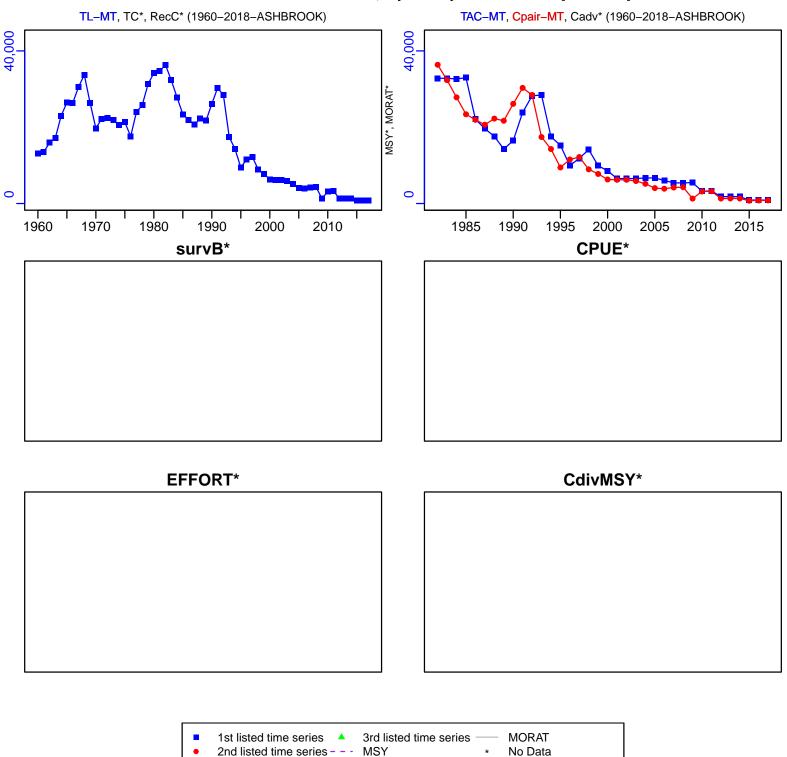


Start Year • End Year \* No Data

#### Atlantic cod Western Scotian Shelf, Bay of Fundy and Gulf of Maine [COD4X5Yb]



### Atlantic cod Western Scotian Shelf, Bay of Fundy and Gulf of Maine [COD4X5Yb]

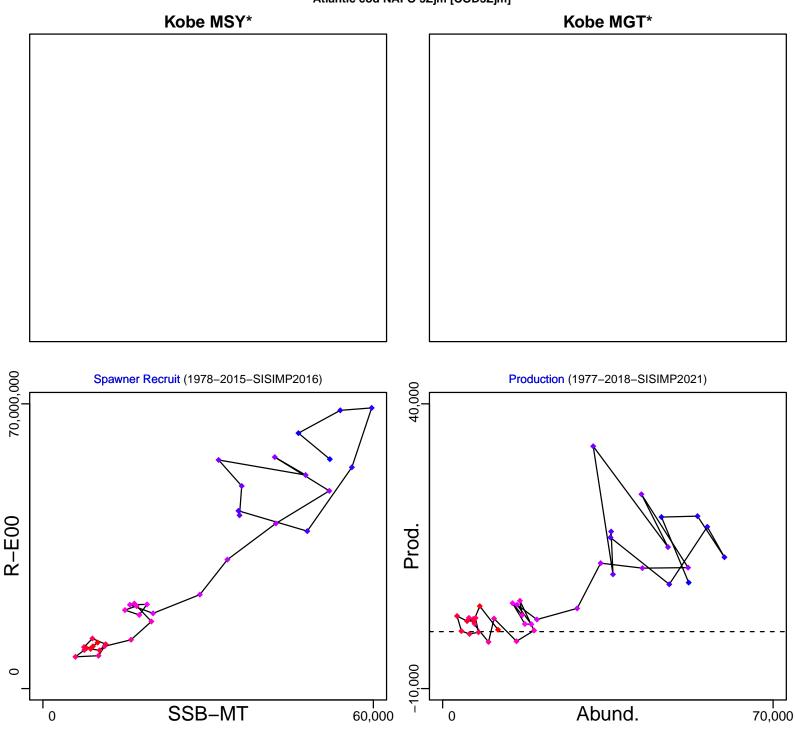


# Atlantic cod NAFO 5Zjm [COD5Zjm]

	Metadata
Scientific Name	Gadus morhua
Current Assess ID	TRAC-COD5Zjm-1978-2020-SISIMP2021-2
Area	NAFO 5Zjm
Management Authority	Transboundary Resource Assessment Committee (USA and Canada)
Assessor	Transboundary Resource Assessment Committee (USA and Canada)
Asmts in RAM	2017, 2018, 2010, 2015, 2018, 2019, 2020

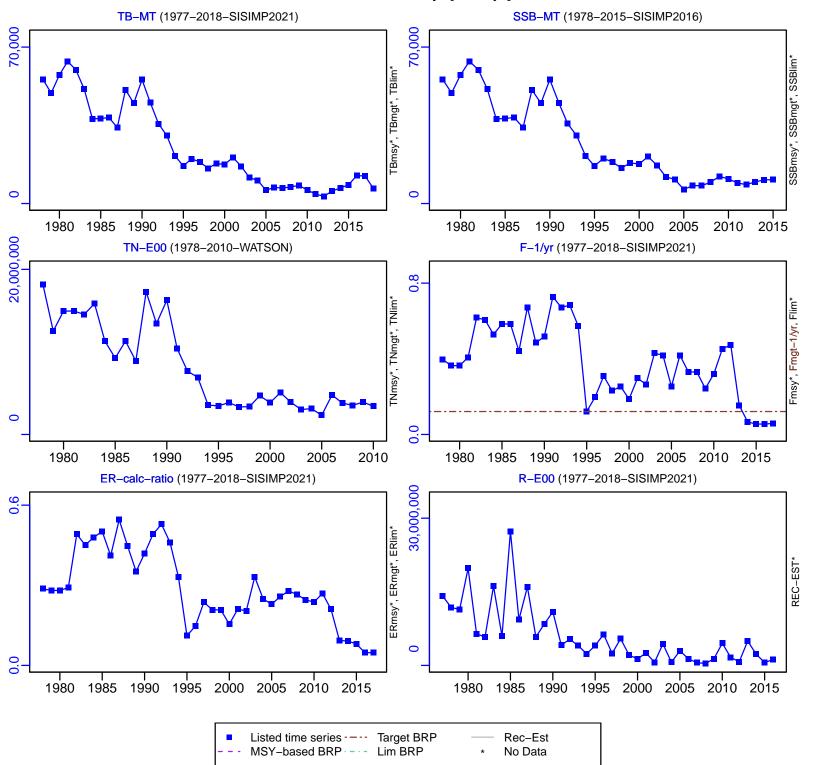
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.11
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2018	0.11
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2010	21,000
Flim	Flim-1/yr	2017	0.11
ERlim	-	-	-

	Tim	e Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2018	6402	-	-
SSB	SSB-MT	2015	10,000	-	3+
TN	TN-E00	2010	3,390,000	-	3+
R	R-E00	2018	1,040,000	-	1
F	F-1/yr	2018	0.053	-	-
ER	ER-calc-ratio	2018	0.046	-	-
TC	TC-MT	2020	67		
TL	TL-MT	2010	1860		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.455		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.482		
ER/ERmgt	-	-	-		

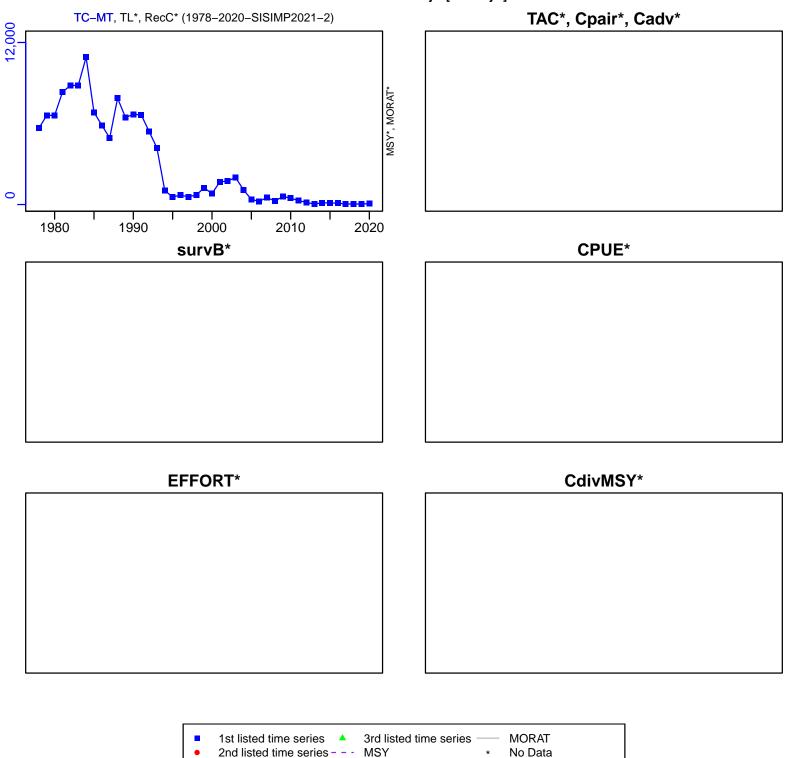


Start Year → End Year → No Data

#### Atlantic cod NAFO 5Zjm [COD5Zjm]



### Atlantic cod NAFO 5Zjm [COD5Zjm]



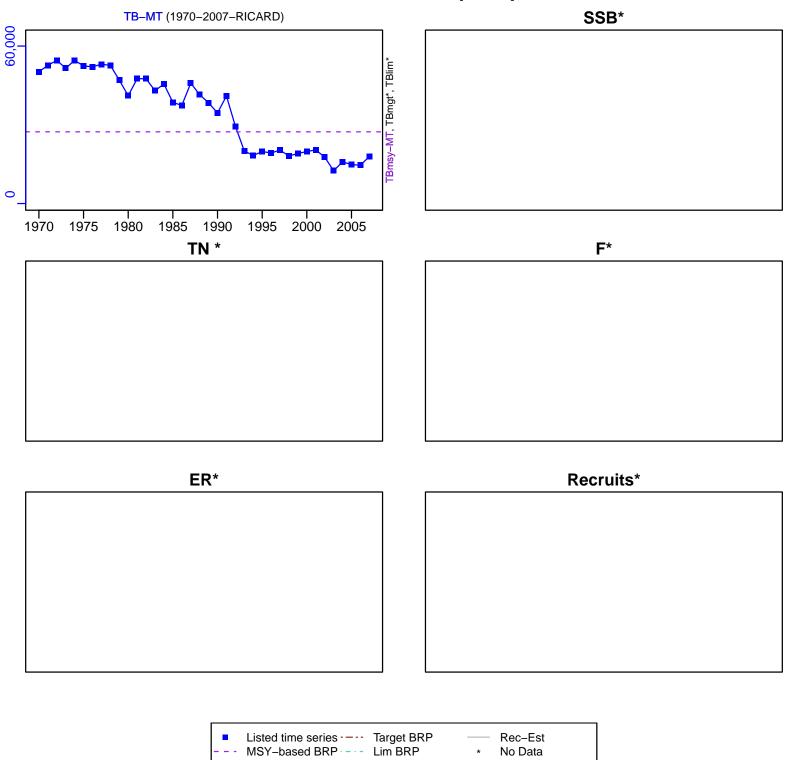
	Metadata
Scientific Name	Brosme brosme
Current Assess ID	DFO-MAR-CUSK4X-1970-2007-RICARD
Area	Western Scotian Shelf
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2007

Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2007	25,790
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2007	0.058
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2007	47,430
SSB0	-	-	-
MSY	MSY-MT	2007	1483
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

	Time	e Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2007	16,900	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-MT	2007	0.655		
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



TC*, TL*, RecC*	TAC*, Cpair*, Cadv*
survB*	CPUE*
FFF0DT*	0 1: 140//*
EFFORT*	CdivMSY*
■ 1st listed time series ▲ 3rd	listed time series — MORAT

No Data

2nd listed time series - - - MSY

	Metadata
Scientific Name	Reinhardtius hippoglossoides
Current Assess ID	NAFO-SC-GHAL01ABCDEF-1987-2006-PREFONTAINE
Area	NAFO divisions 01ABCDEF
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2006

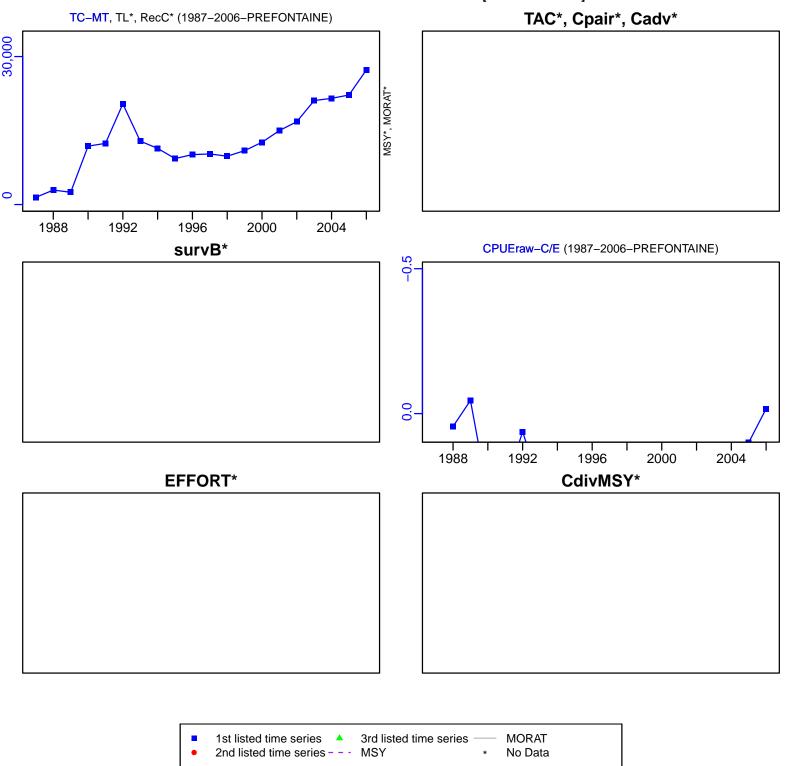
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2006	0.22
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

		Time Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2006	24,200		
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*
ED*	Doowyita*
ER*	Recruits*
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data
MSY-based BRP Li	m BRP * No Data



# **Greenland halibut Labrador Shelf - Grand Banks [GHAL23KLMNO]**

Metadata			
Scientific Name Reinhardtius hippoglossoides			
Current Assess ID NAFO-SC-GHAL23KLMNO-1960-2010-WATSON			
Area Labrador Shelf - Grand Banks			
Management Authority Northwest Atlantic Fisheries Organization			
Assessor	NAFO Scientific Council		
Asmts in RAM	2006, 2010		

Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2006	0.2		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

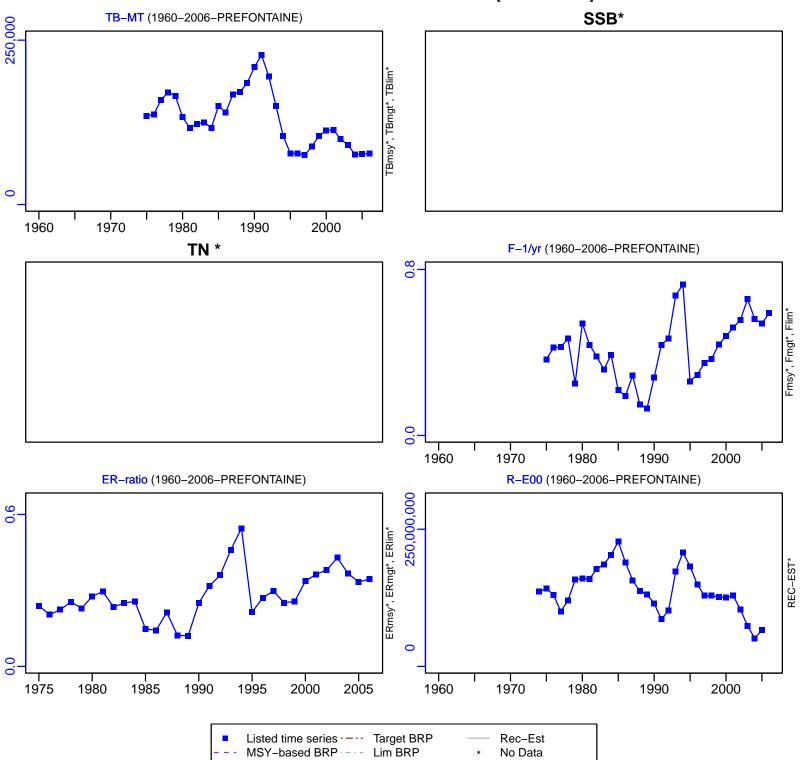
Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2006	76,500	-	5+	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	R-E00	2006	54,600,000	-	-	
F	F-1/yr	2006	0.588	-	5 to 10	
ER	ER-ratio	2006	0.314	-	-	
TC	TC-MT	2010	6530			
TL	TL-MT	2006	24,000			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

## Greenland halibut Labrador Shelf – Grand Banks [GHAL23KLMNO]

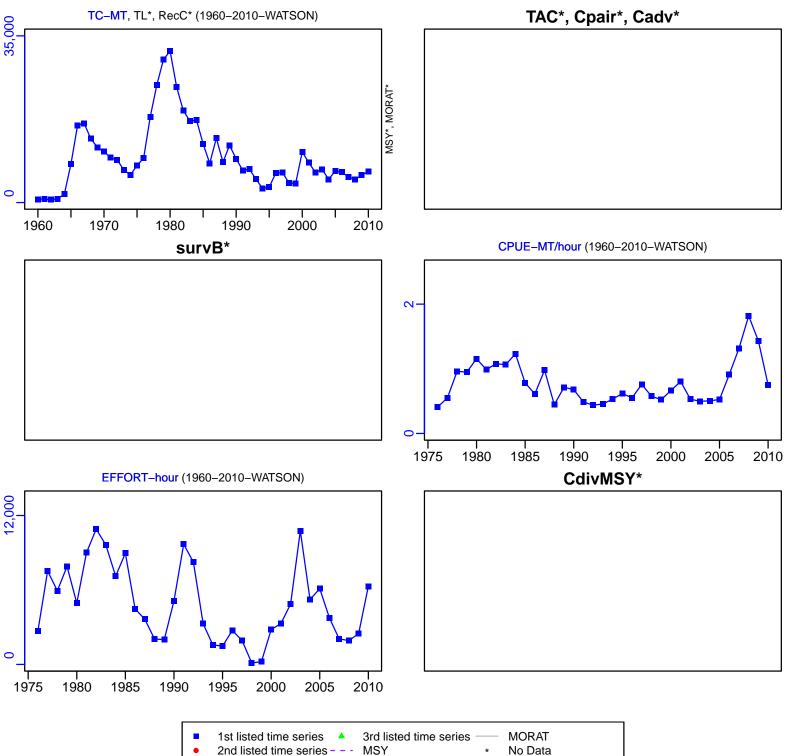
Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data

## Greenland halibut Labrador Shelf - Grand Banks [GHAL23KLMNO]



### Greenland halibut Labrador Shelf - Grand Banks [GHAL23KLMNO]



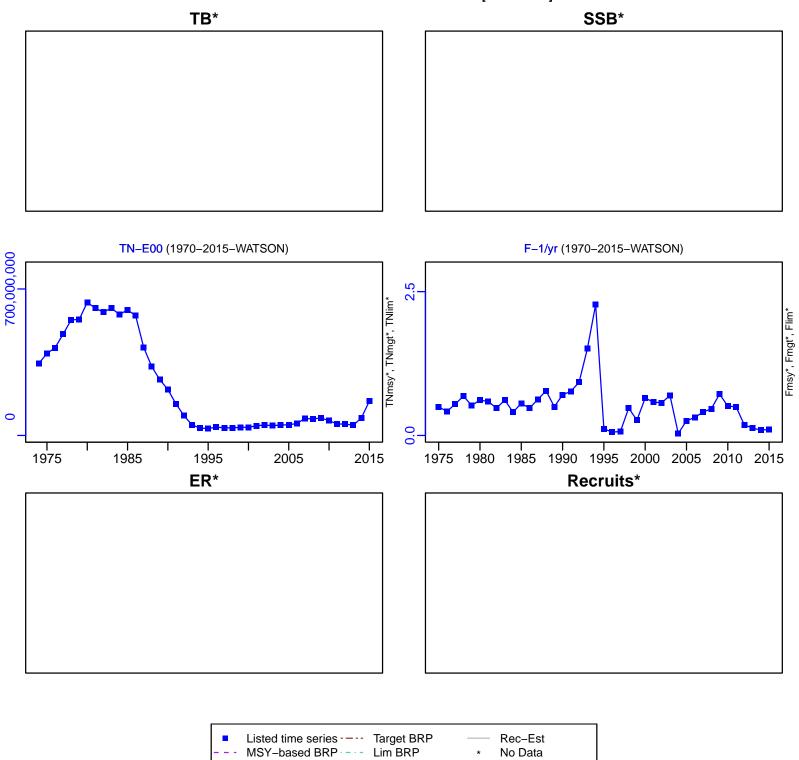
Metadata				
Scientific Name	Reinhardtius hippoglossoides			
Current Assess ID	DFO-QUE-GHAL4RST-1971-2019-ASHBROOK			
Area	Gulf of St. Lawrence			
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Quebec Region			
Asmts in RAM	2015, 2002, 2019			

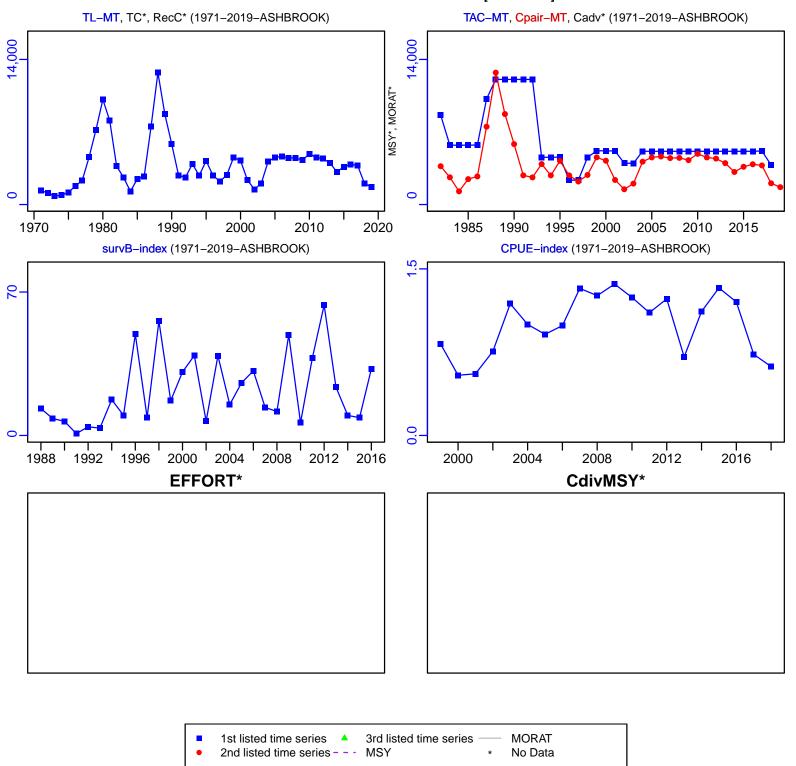
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	TN-E00	2015	$1.44 \times 10^{8}$	-	3+
R	-	-	-	-	-
F	F-1/yr	2015	0.09	-	7 to 9
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2019	1458		
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





Metadata			
Scientific Name	Strongylocentrotus droebachiensis		
Current Assess ID	DFO-QUE-GURCH4RST-1991-2015-ASHBROOK		
Area Gulf of St. Lawrence			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Quebec Region		
Asmts in RAM	2011, 2015		

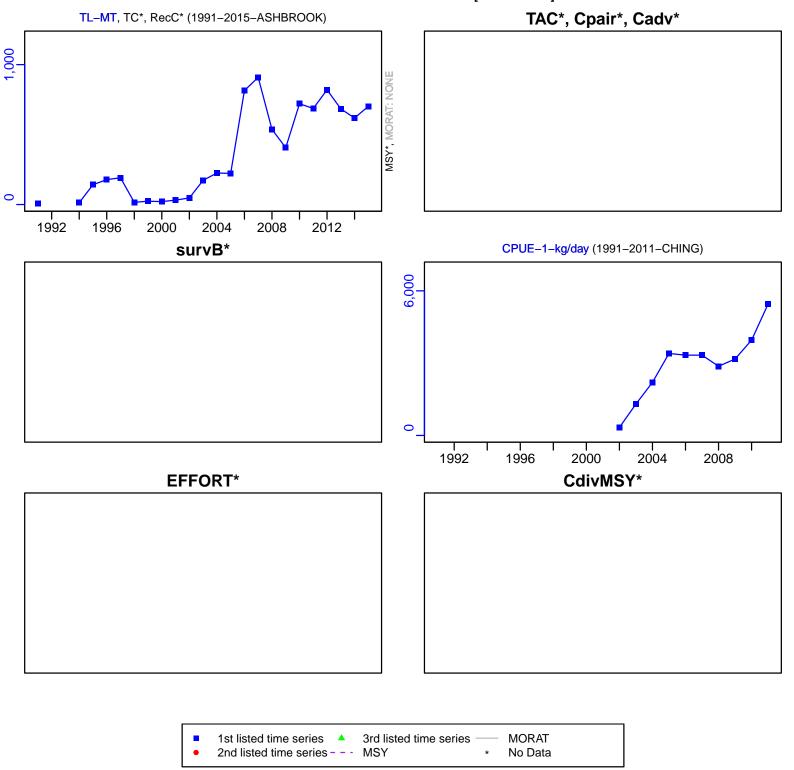
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	589		
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*
	<b>-</b>
ER*	Recruits*
Listed time series Ta	arget BRP — Rec-Est

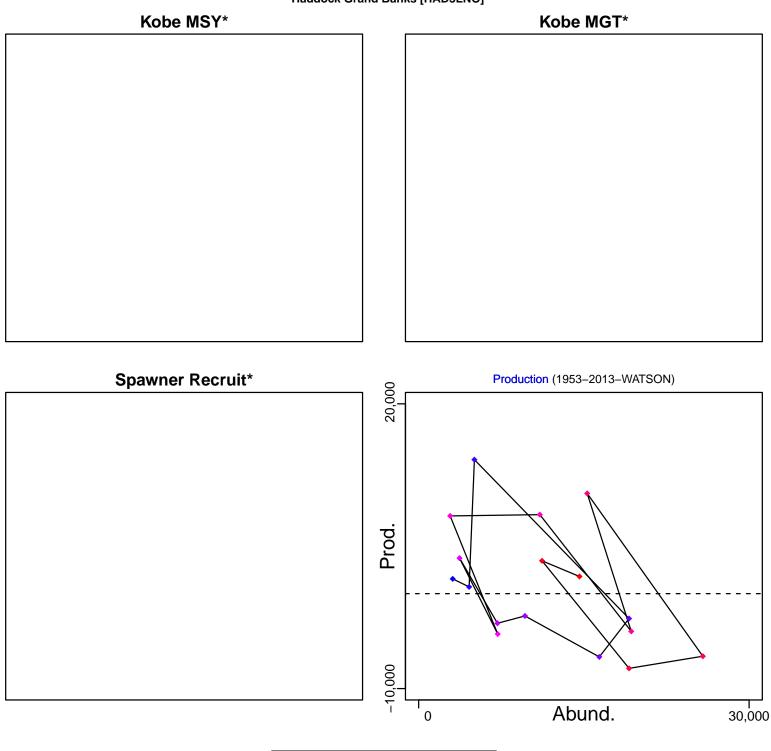


# Haddock Grand Banks [HAD3LNO]

Metadata			
Scientific Name Melanogrammus aeglefinus			
Current Assess ID NAFO-SC-HAD3LNO-1953-2017-ASHBROOK			
Area Grand Banks			
Management Authority Northwest Atlantic Fisheries Organization			
Assessor NAFO Scientific Council			
Asmts in RAM	2013, 2017		

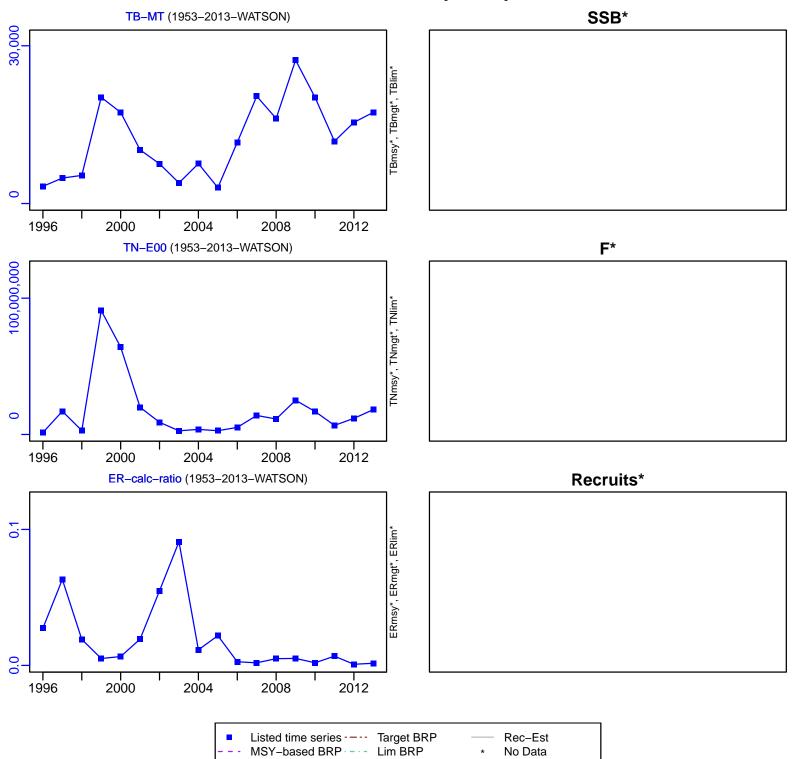
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2013	16,400	-	-
SSB	-	-	-	-	-
TN	TN-E00	2013	14,900,000	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2013	0.001	-	-
TC	TC-MT	2017	228		,,
TL	TL-MT	2013	21		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	1	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

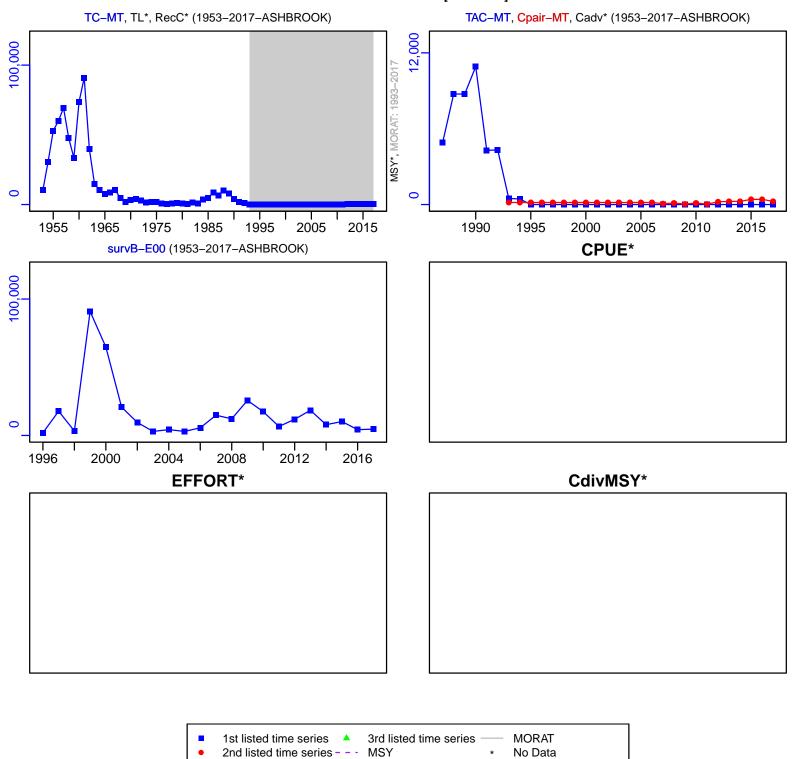


Start Year → End Year → No Data

### Haddock Grand Banks [HAD3LNO]



## Haddock Grand Banks [HAD3LNO]



Metadata			
Scientific Name	Melanogrammus aeglefinus		
Current Assess ID	DFO-NFLD-HAD3Ps-1953-2018-ASHBROOK		
Area St. Pierre Bank			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Newfoundland Region		
Asmts in RAM	2018		

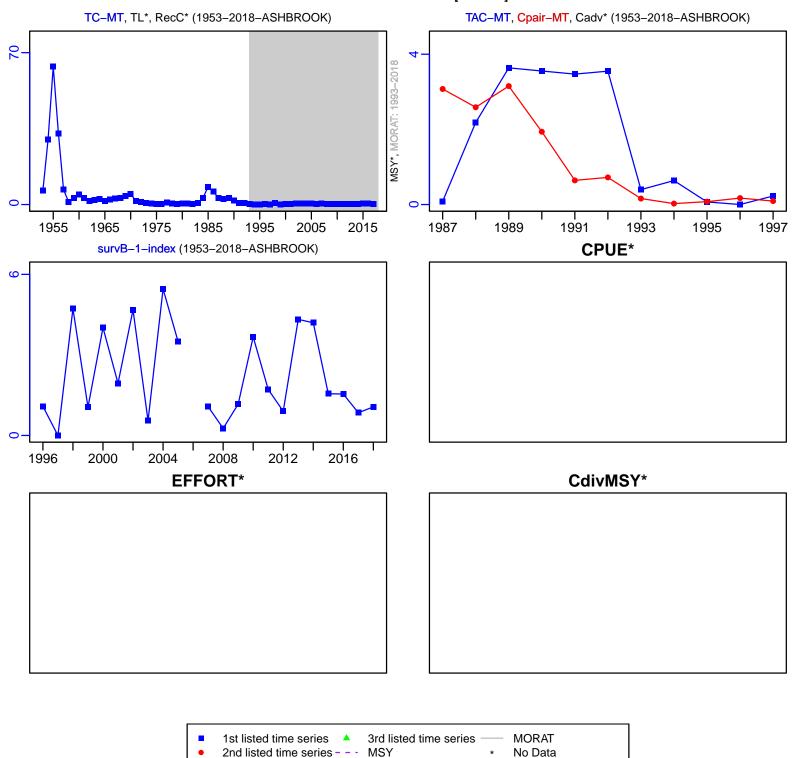
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	0.254		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
<b>a b</b> 100	B. J. d *
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data

TB*	SSB*
TN *	F*
ER*	Recruits*
ER	Reciuits
■ Listed time series Ta MSY-based BRP Li	arget BRP — Rec-Est
MSY-based BRP Li	m BRP * No Data

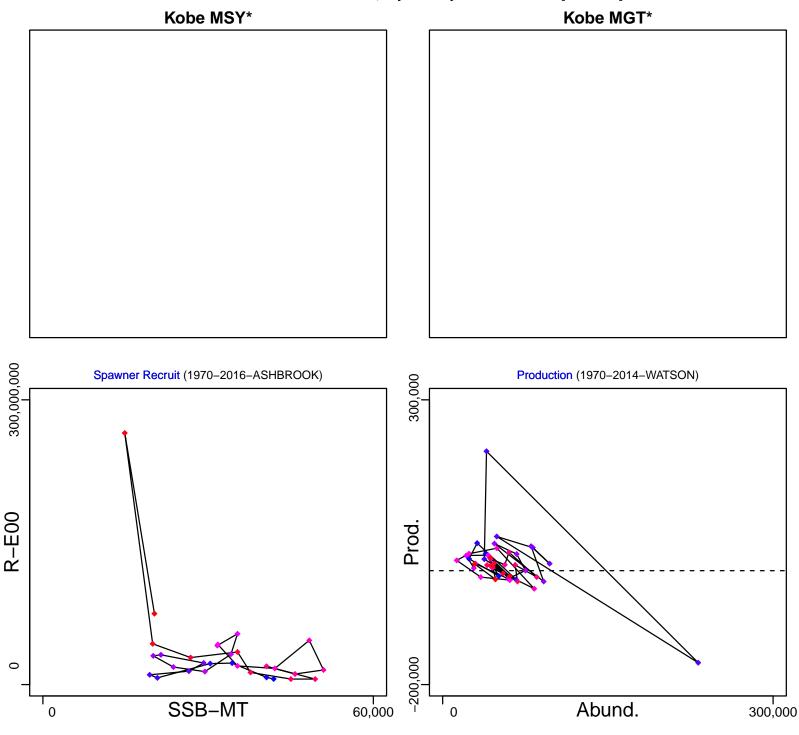


# Haddock Western Scotian Shelf, Bay of Fundy and Gulf of Maine [HAD4X5Y]

Metadata			
Scientific Name	Melanogrammus aeglefinus		
Current Assess ID DFO-MAR-HAD4X5Y-1970-2016-ASHBROOK			
Area Western Scotian Shelf, Bay of Fundy and Gulf of Maine			
Management Authority Department of Fisheries and Oceans, Canada national manageme			
Assessor Department of Fisheries and Oceans - Maritimes Region			
Asmts in RAM	2014, 2011, 2016		

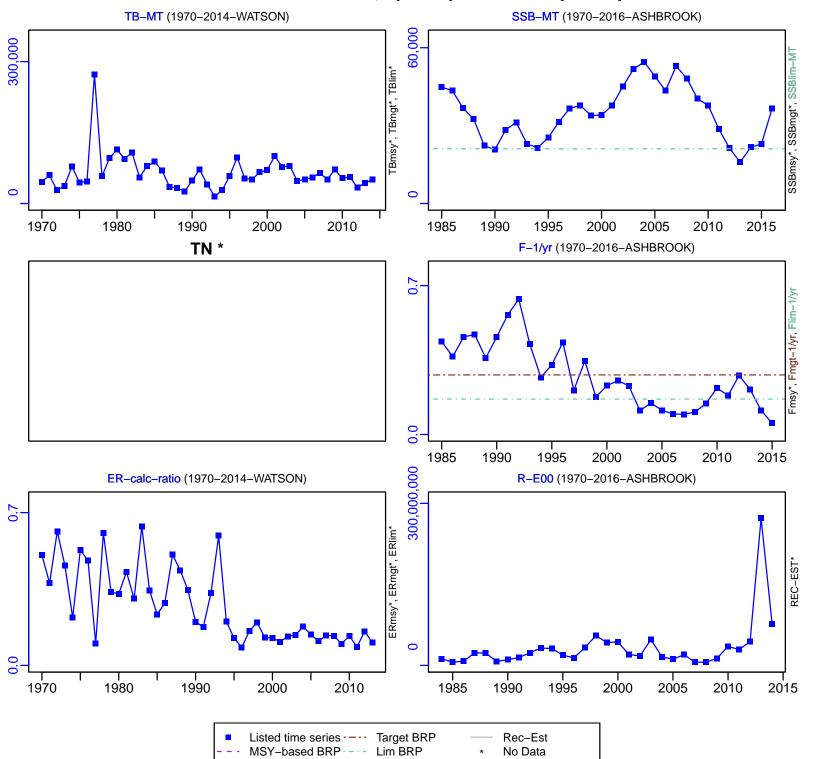
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	SSBmsy-MT	2011	52,000	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	Fmgt-1/yr	2016	0.25	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	MSY-MT	2011	14,700	
М	-	-	-	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2016	19,700	
Flim	Flim-1/yr	2016	0.149	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2014	42,900	Both	-
SSB	SSB-MT	2016	34,147	-	4+
TN	-	-	-	-	-
R	R-E00	2016	74,730,530	-	1
F	F-1/yr	2016	0.048	-	10-Jun
ER	ER-calc-ratio	2014	0.096	-	-
TC	TC-MT	2014	3520		
TL	TL-MT	2016	2926		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	0.821		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	0.191		
ER/ERmgt	-	-	-		

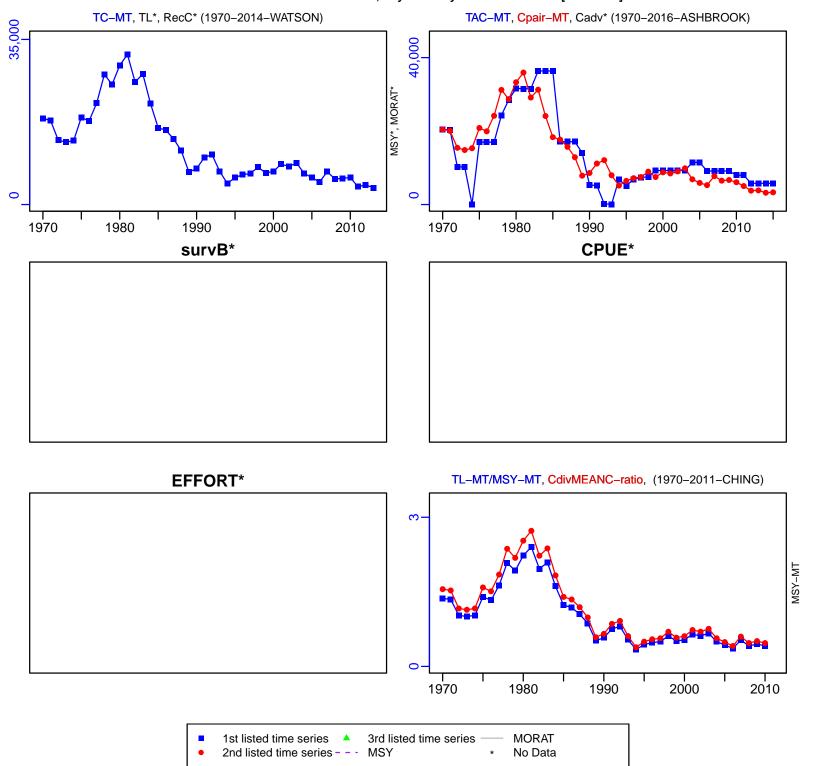


Start Year • End Year • No Data

#### Haddock Western Scotian Shelf, Bay of Fundy and Gulf of Maine [HAD4X5Y]



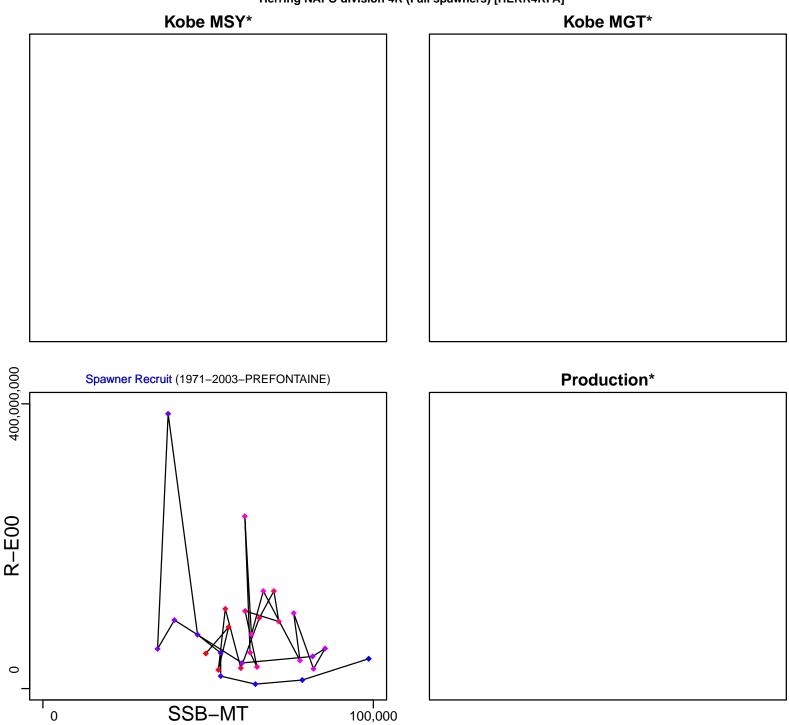
### Haddock Western Scotian Shelf, Bay of Fundy and Gulf of Maine [HAD4X5Y]



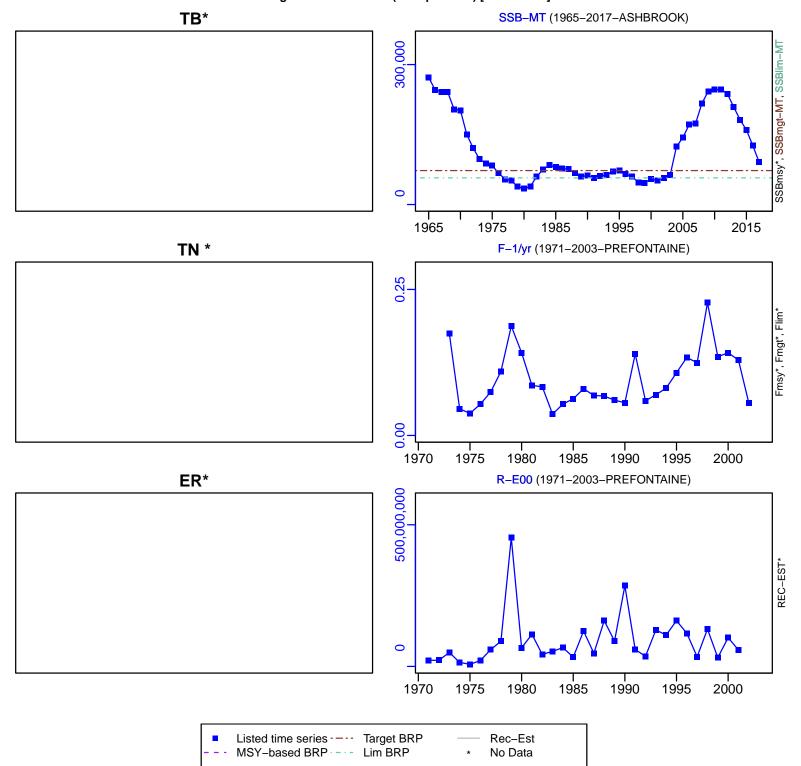
Metadata		
Scientific Name	Clupea harengus	
Current Assess ID	DFO-QUE-HERR4RFA-1965-2017-ASHBROOK	
Area	NAFO division 4R (Fall spawners)	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2017, 2003	

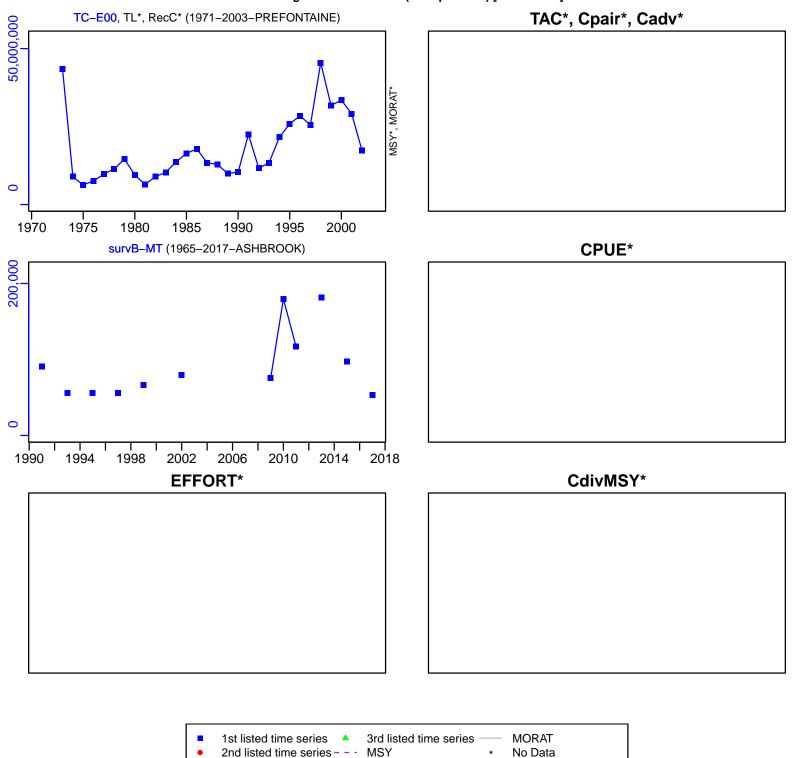
Reference Points				
Type	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2017	61,074	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	M-1/yr	2003	0.2	
TBlim	TBlim-MT	2003	47,953	
SSBlim	SSBlim-MT	2017	47,902	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2017	76,383	-	-
TN	-	-	-	-	-
R	R-E00	2003	49,300,000	-	2
F	F-1/yr	2003	0.049	-	4+
ER	-	-	-	-	-
TC	TC-E00	2003	16,200,000		
TL	TL-MT	2003	4499		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	1.251		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Start Year • End Year \* No Data



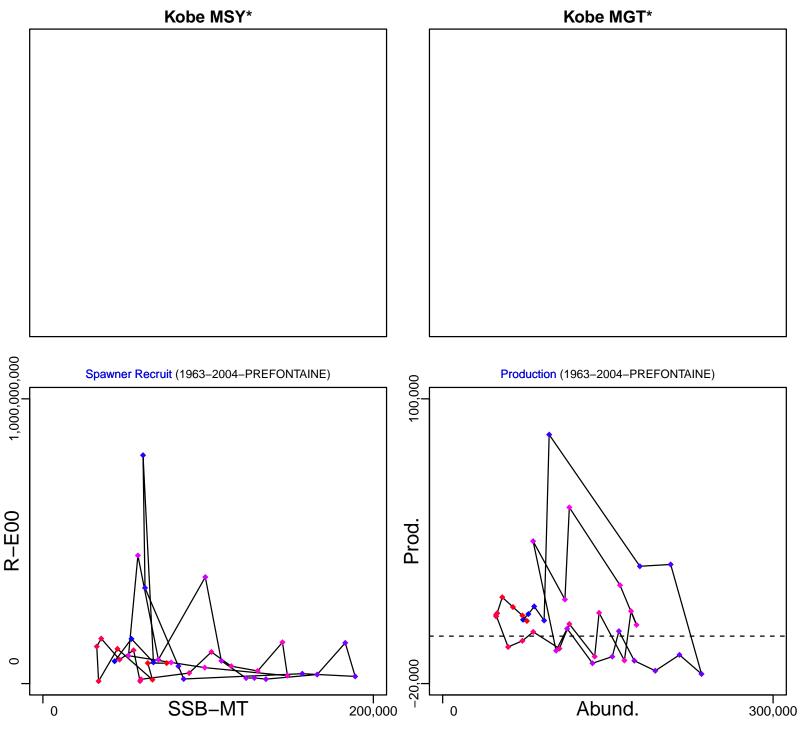


# Herring NAFO division 4R (Spring spawners) [HERR4RSP]

Metadata		
Scientific Name	Clupea harengus	
Current Assess ID	DFO-QUE-HERR4RSP-1965-2017-ASHBROOK	
Area	NAFO division 4R (Spring spawners)	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2004, 2017	

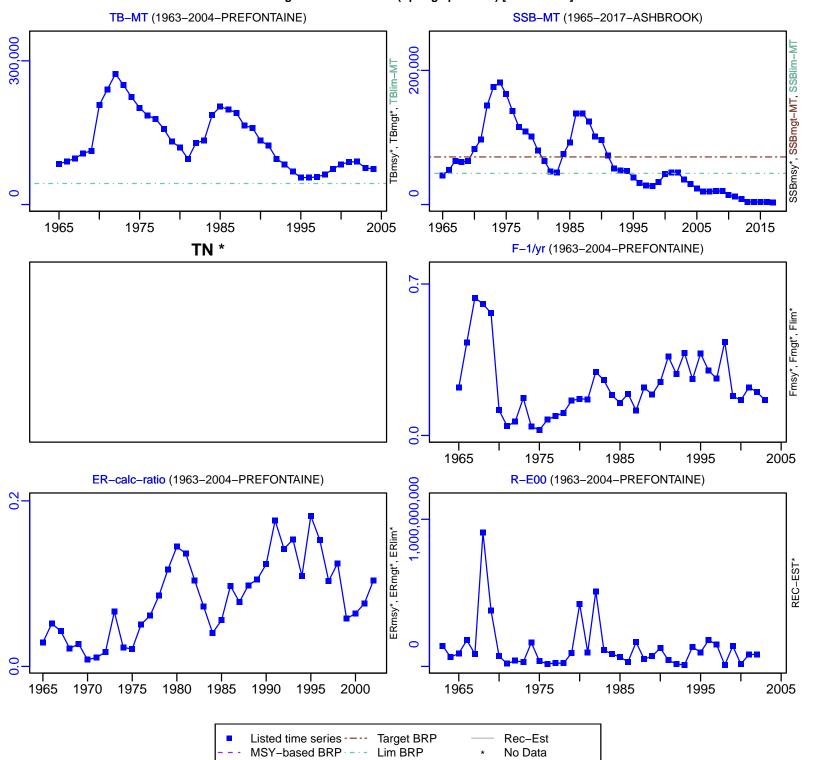
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2017	57,081	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	M-1/yr	2004	0.2	
TBlim	TBlim-MT	2004	37,831	
SSBlim	SSBlim-MT	2017	37,384	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2004	64,300	-	-
SSB	SSB-MT	2017	2192	-	-
TN	-	-	-	-	-
R	R-E00	2004	71,800,000	-	2
F	F-1/yr	2004	0.148	-	4+
ER	ER-calc-ratio	2004	0.103	-	-
TC	TC-E00	2004	22,700,000		
TL	TL-MT	2004	7926		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.038		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

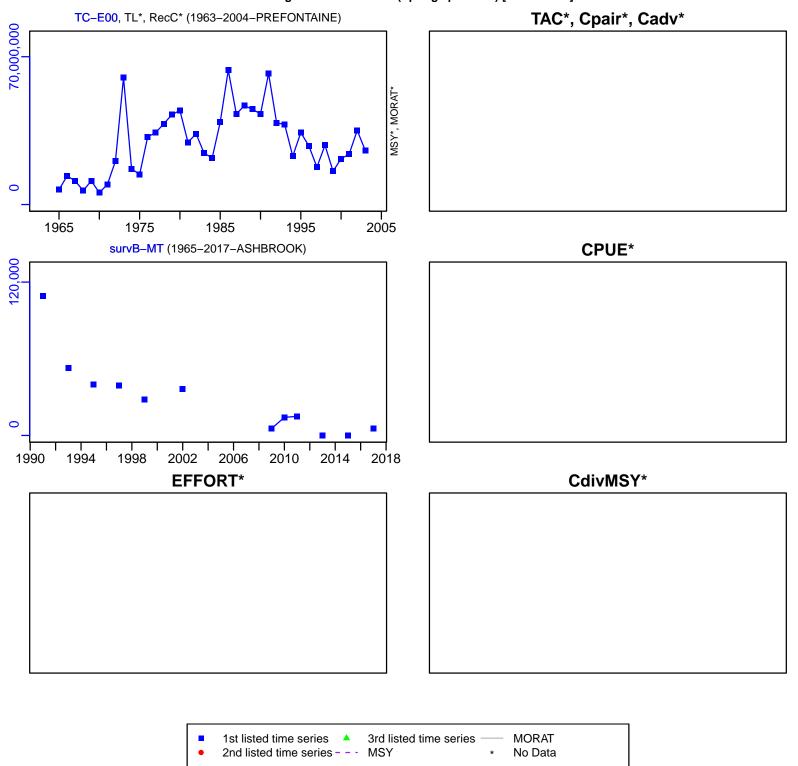


Start Year • End Year • No Data

#### Herring NAFO division 4R (Spring spawners) [HERR4RSP]



### Herring NAFO division 4R (Spring spawners) [HERR4RSP]



Metadata		
Scientific Name	Clupea harengus	
Current Assess ID	DFO-QUE-HERR4SFS-1985-2018-ASHBROOK	
Area	Quebec North Shore (Fall spawners)	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2018	

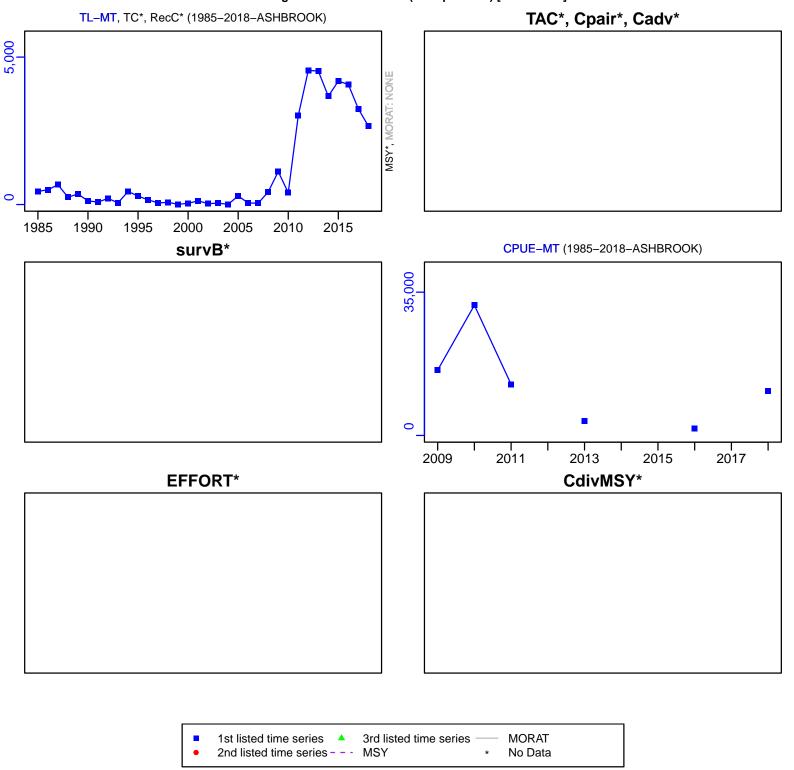
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	2355		
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*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



Metadata		
Scientific Name	Clupea harengus	
Current Assess ID	DFO-QUE-HERR4SSS-1985-2018-ASHBROOK	
Area	Quebec North Shore (Spring spawners)	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2018	

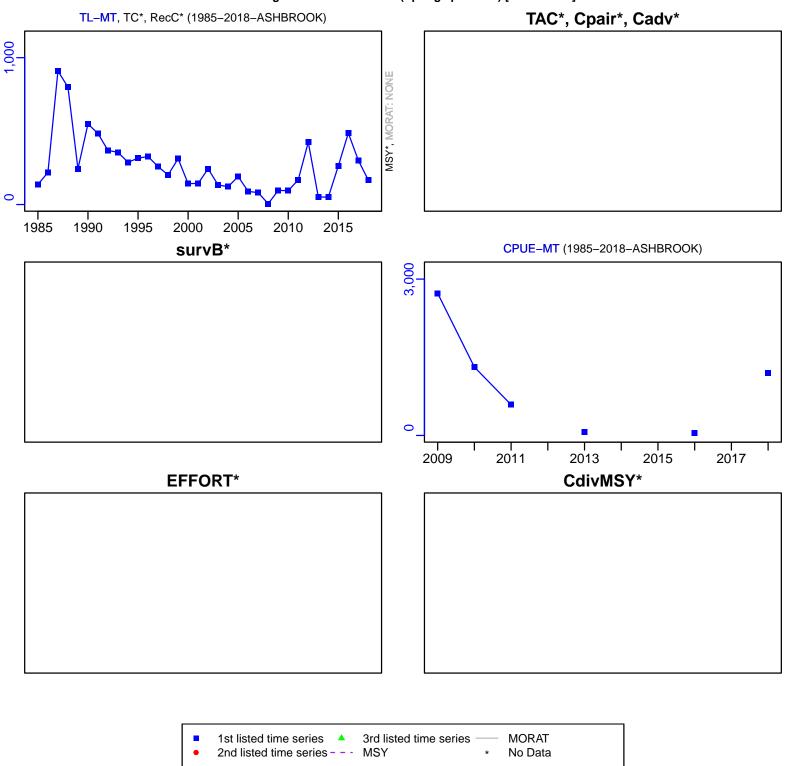
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
M	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	146		
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

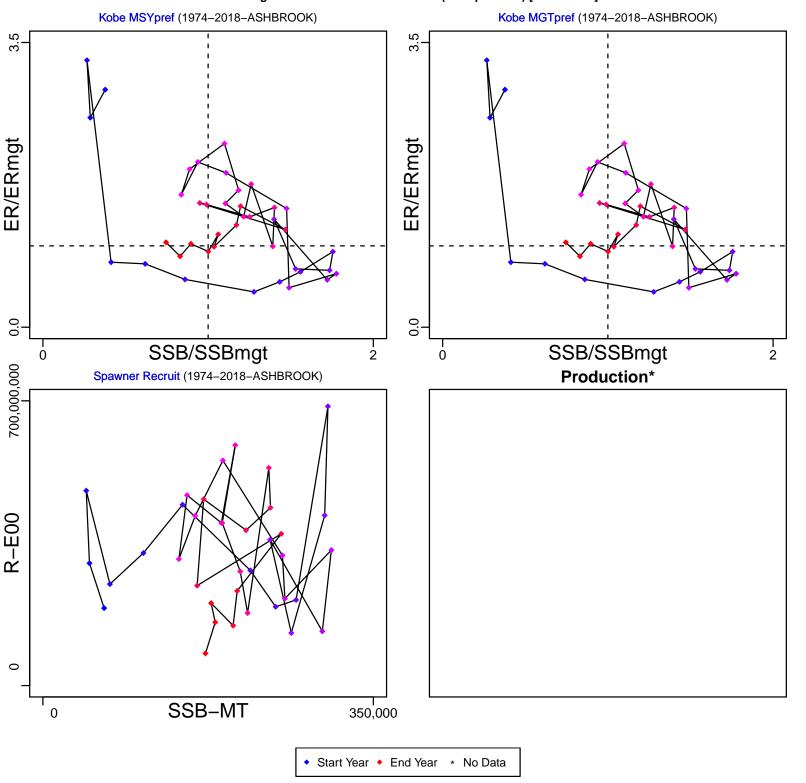
TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data

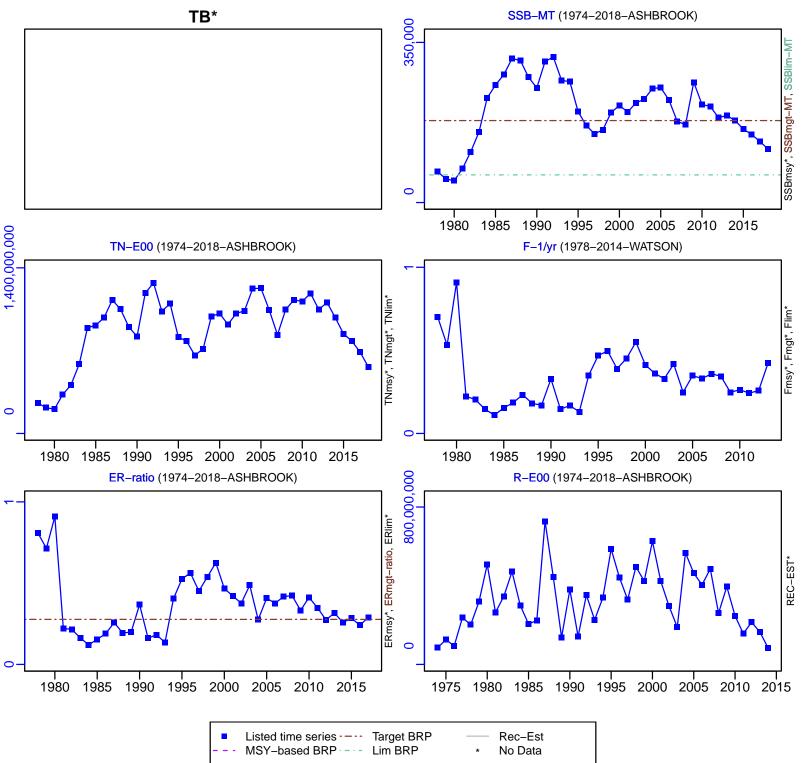


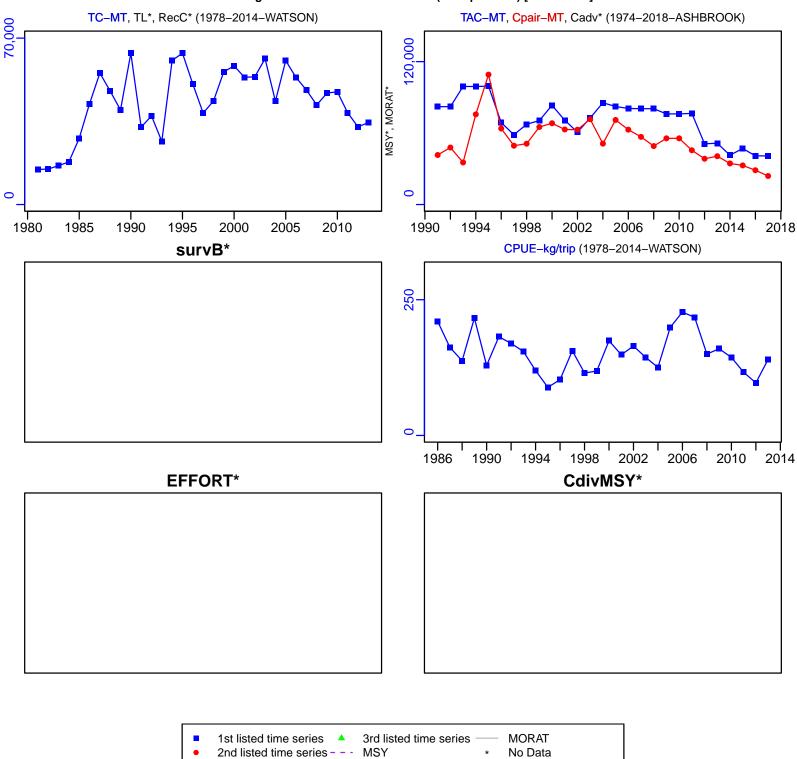
Metadata			
Scientific Name	Clupea harengus		
Current Assess ID	DFO-SG-HERR4TFA-1974-2018-ASHBROOK		
Area	Southern Gulf of St. Lawrence (Fall spawners)		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Southern Gulf Region		
Asmts in RAM	2014, 2007, 2018		

Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2018	172,000	
Fmgt	-	-	-	
ERmgt	ERmgt-ratio	2018	0.27	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	M-1/yr	2014	0.2	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2018	58,000	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2018	112,000	-	-
TN	TN-E00	2018	559,253,800	-	4+
R	R-E00	2018	79,119,050	-	4
F	F-1/yr	2014	0.423	Both	5 to 10
ER	ER-ratio	2018	0.282	-	-
TC	TC-MT	2014	34,400		
TL	TL-MT	2018	20,523		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.651		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



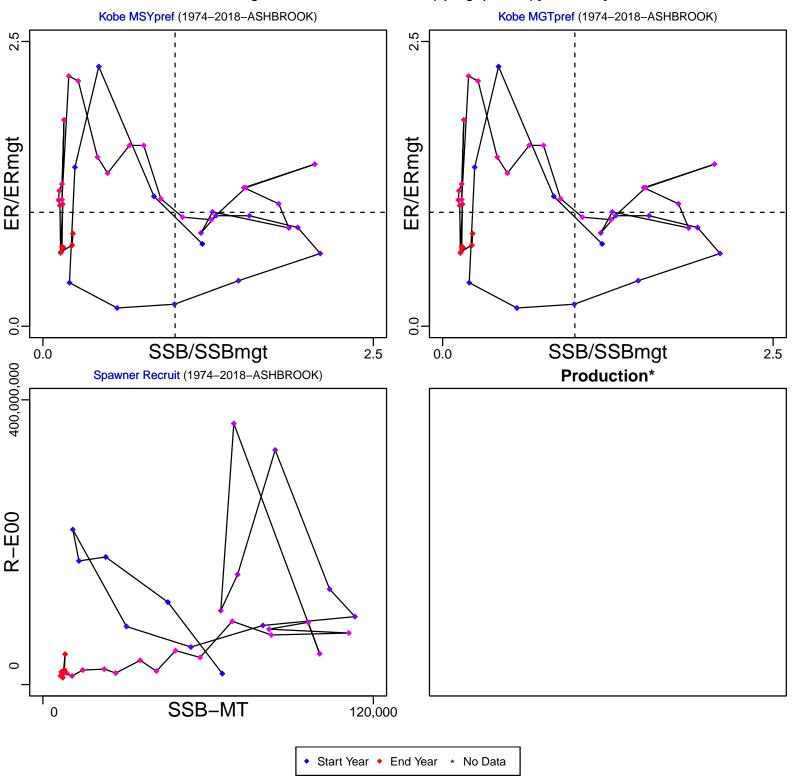


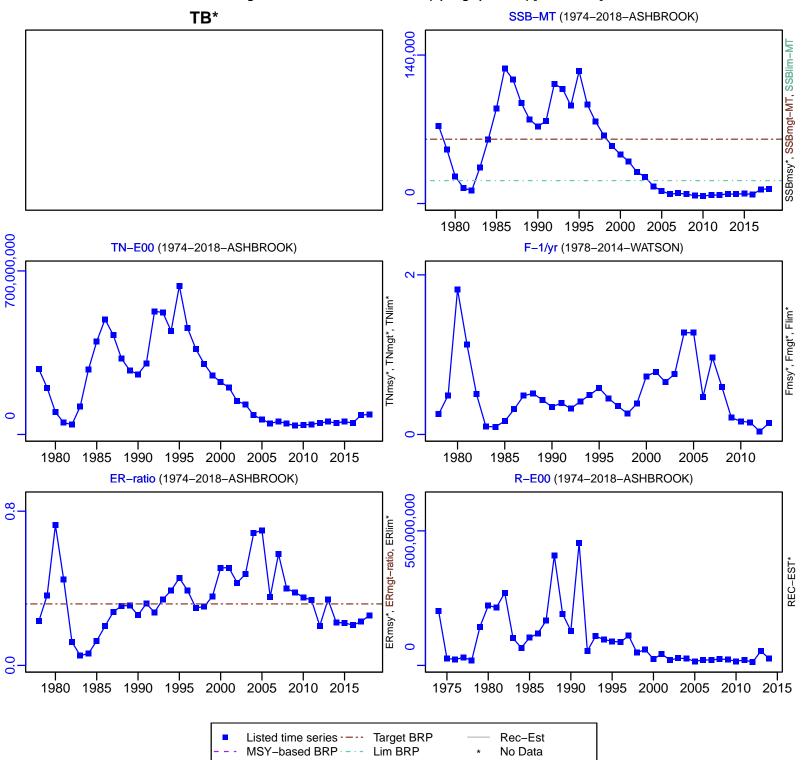


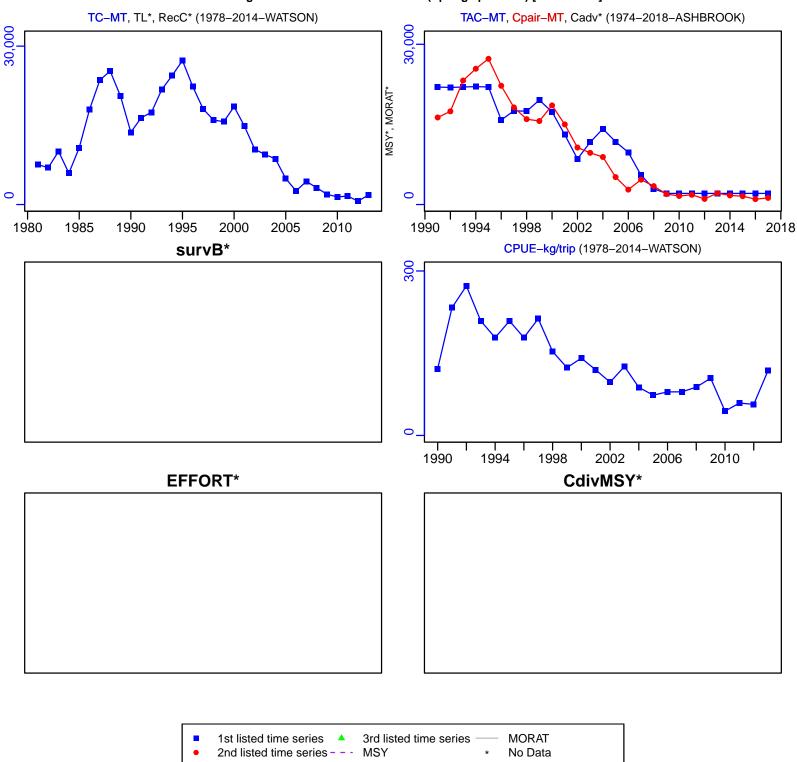
Metadata			
Scientific Name	Clupea harengus		
Current Assess ID	DFO-SG-HERR4TSP-1974-2018-ASHBROOK		
Area	Southern Gulf of St. Lawrence (Spring spawners)		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Southern Gulf Region		
Asmts in RAM	2014, 2007, 2018		

Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2018	54,000	
Fmgt	-	-	-	
ERmgt	ERmgt-ratio	2018	0.295	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	M-1/yr	2014	0.2	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2018	19,250	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2018	12,251	-	-
TN	TN-E00	2018	84,033,190	-	4+
R	R-E00	2018	20,737,226	-	4
F	F-1/yr	2014	0.137	Both	5 to 10
ER	ER-ratio	2018	0.24	-	8-Jun
TC	TC-MT	2014	1700		
TL	TL-MT	2018	1189		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.227		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





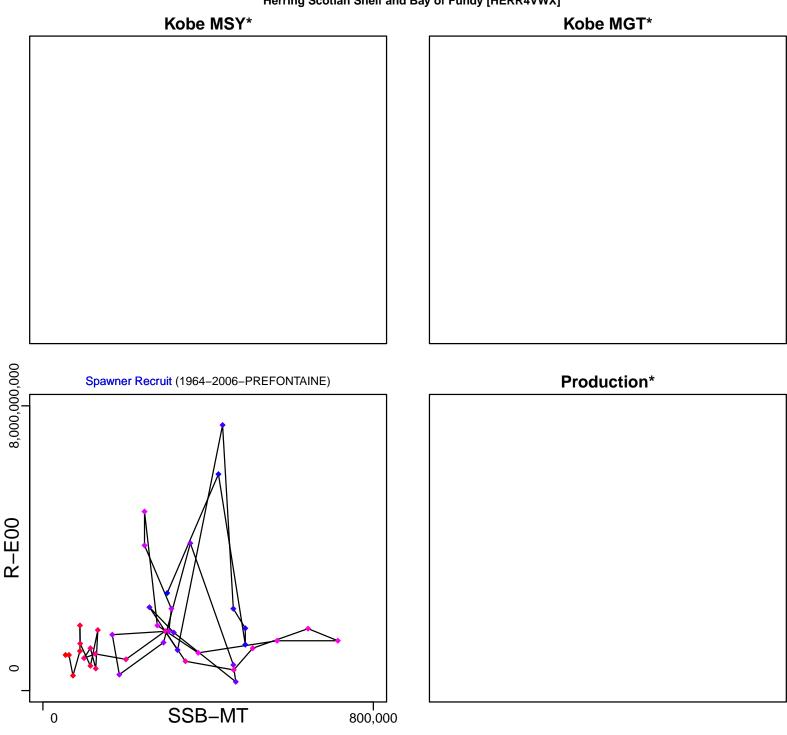


# Herring Scotian Shelf and Bay of Fundy [HERR4VWX]

Metadata			
Scientific Name	Clupea harengus		
Current Assess ID	DFO-MAR-HERR4VWX-1966-2017-ASHBROOK		
Area	Scotian Shelf and Bay of Fundy		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2012, 2006, 2017		

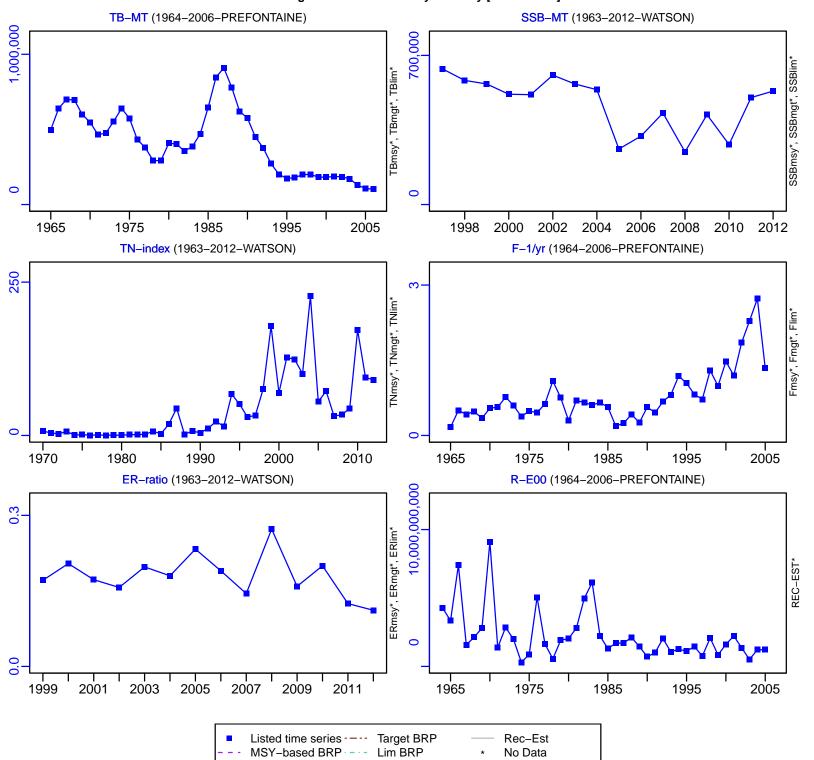
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2006	0.2		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2006	91,700	-	-
SSB	SSB-MT	2012	476,000	-	-
TN	TN-index	2012	83	-	-
R	R-E00	2006	$1 \times 10^{9}$	-	1
F	F-1/yr	2006	1.21	-	5 to 8
ER	ER-ratio	2012	0.101	Both	-
TC	-	-	-		
TL	TL-MT	2017	39,997		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

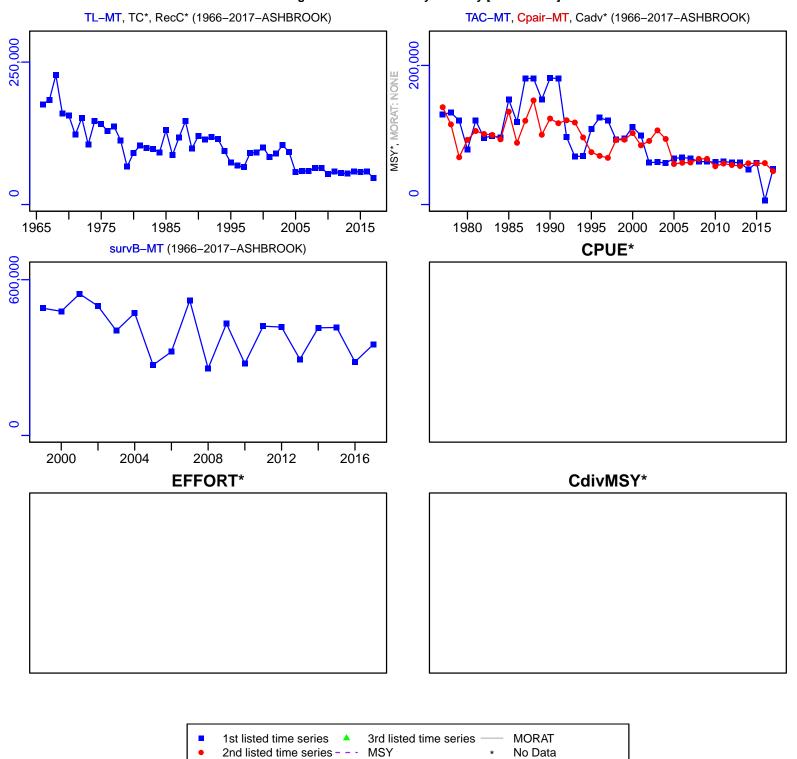


Start Year • End Year • No Data

#### Herring Scotian Shelf and Bay of Fundy [HERR4VWX]



### Herring Scotian Shelf and Bay of Fundy [HERR4VWX]



Metadata			
Scientific Name	Clupea harengus		
Current Assess ID	DFO-HERRNFLDESC-1966-2018-ASHBROOK		
Area Newfoundland East and South Coast			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans		
Asmts in RAM	2014, 2018		

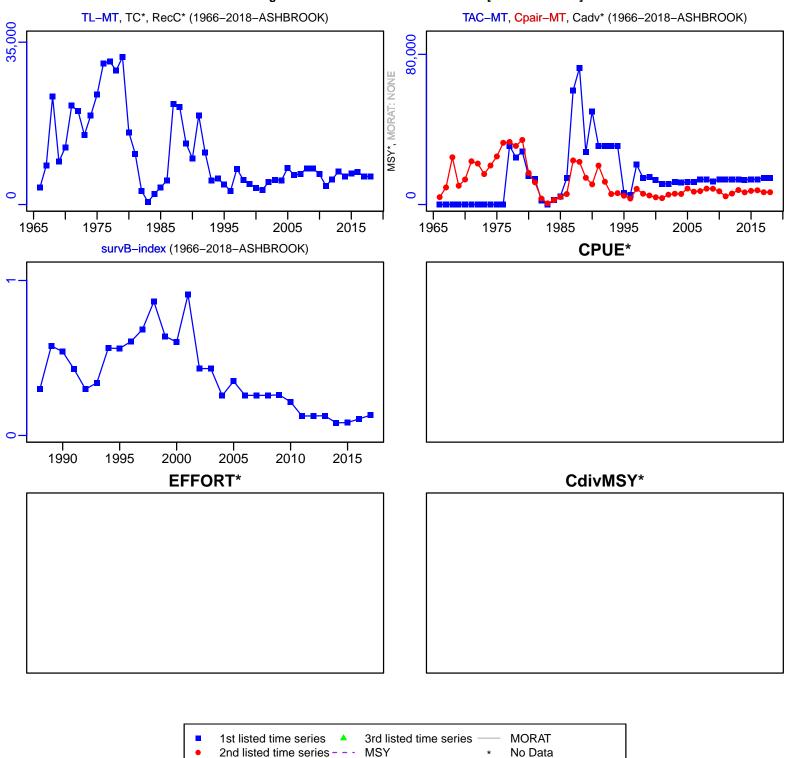
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	5907		
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 *	<b>F</b> *
ED*	Doow.ito*
ER*	Recruits*
Listed time series T	proof PPD —— Poc. Ect
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data



## Iceland scallop St. Pierre Bank [ILSCALL3Ps]

Metadata			
Scientific Name	Chlamys islandica		
Current Assess ID	DFO-NFLD-ILSCALL3Ps-1989-2017-ASHBROOK		
Area	St. Pierre Bank		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Newfoundland Region		
Asmts in RAM	2017		

Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2017	0.07		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

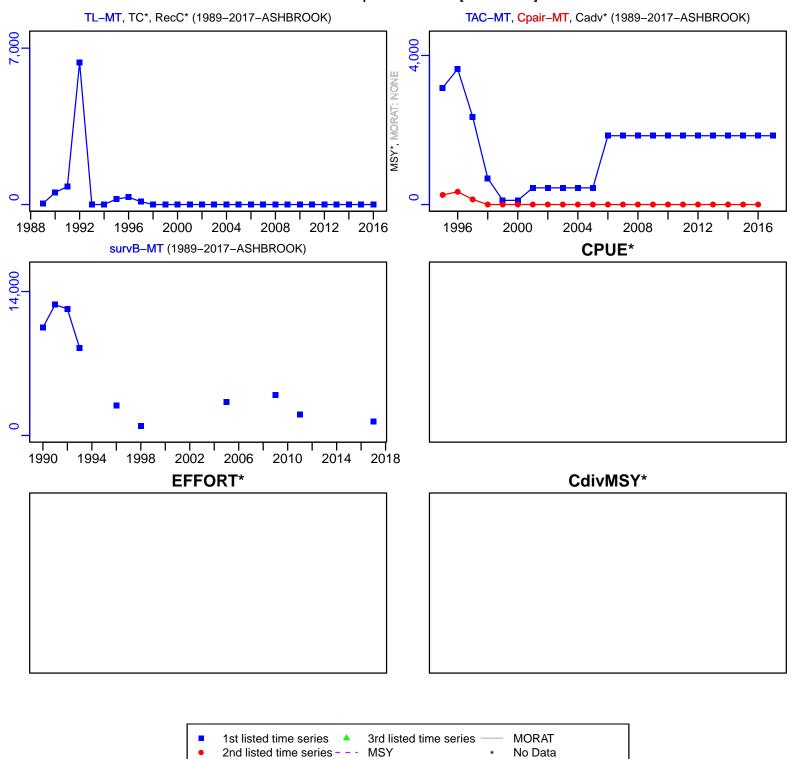
#### Iceland scallop St. Pierre Bank [ILSCALL3Ps]

Kobe MSY*	Kobe MGT*
O D !#	Dua desation#
Spawner Recruit*	Production*
Spawner Recruit <sup>*</sup>	Production*
Spawner Recruit <sup>*</sup>	Production
Spawner Recruit*	Production*
Spawner Recruit*	Production*

### Iceland scallop St. Pierre Bank [ILSCALL3Ps]

TB*	SSB*
TN *	F*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data

#### Iceland scallop St. Pierre Bank [ILSCALL3Ps]



# American lobster Quebec North Shore and Anticosti Island (LFA 15-18) [LOBSTERLFA15-18]

Metadata			
Scientific Name	Homarus americanus		
Current Assess ID	DFO-QUE-LOBSTERLFA15-18-1984-2018-ASHBROOK		
Area Quebec North Shore and Anticosti Island (LFA 15-18)			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Quebec Region		
Asmts in RAM	2011, 2018		

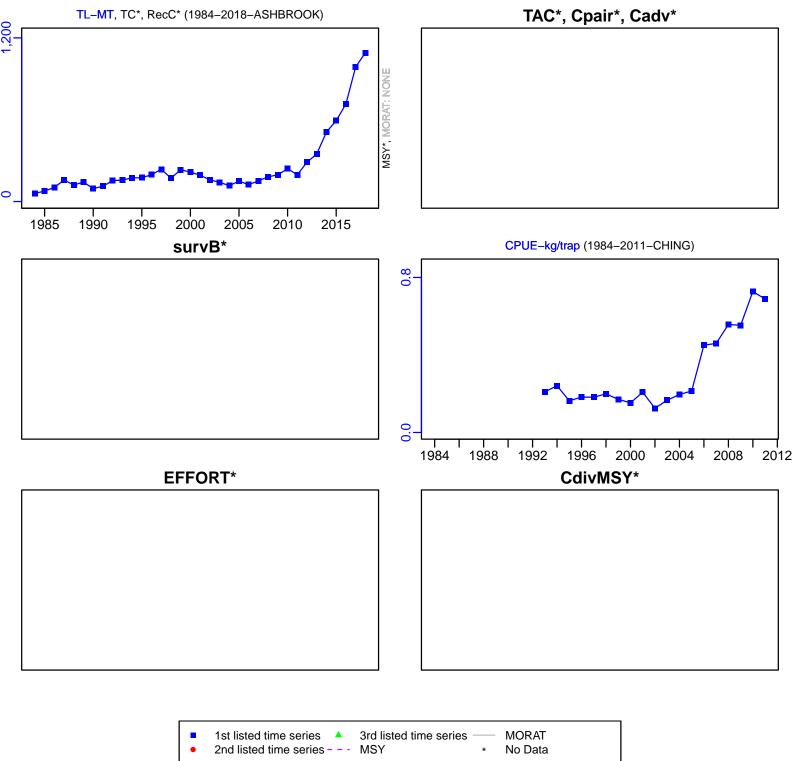
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	ı
F	-	-	-	-	-
ER	-	-	-	-	ı
TC	-	-	-		
TL	TL-MT	2018	1070		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

American lobster Quebec North Shore and Anticosti Island (LFA 15–18) [LOBSTERLFA15–18] **Kobe MSY\* Kobe MGT\*** Spawner Recruit\* **Production\*** 

American lobster Quebec North Shore and Anticosti Island (LFA 15-18) [LOBSTERLFA15-18] TB\* SSB\* **TN** \* F\* Recruits\* ER\*

■ Listed time series ---- Target BRP — Rec-Est
- -- MSY-based BRP ---- Lim BRP \* No Data



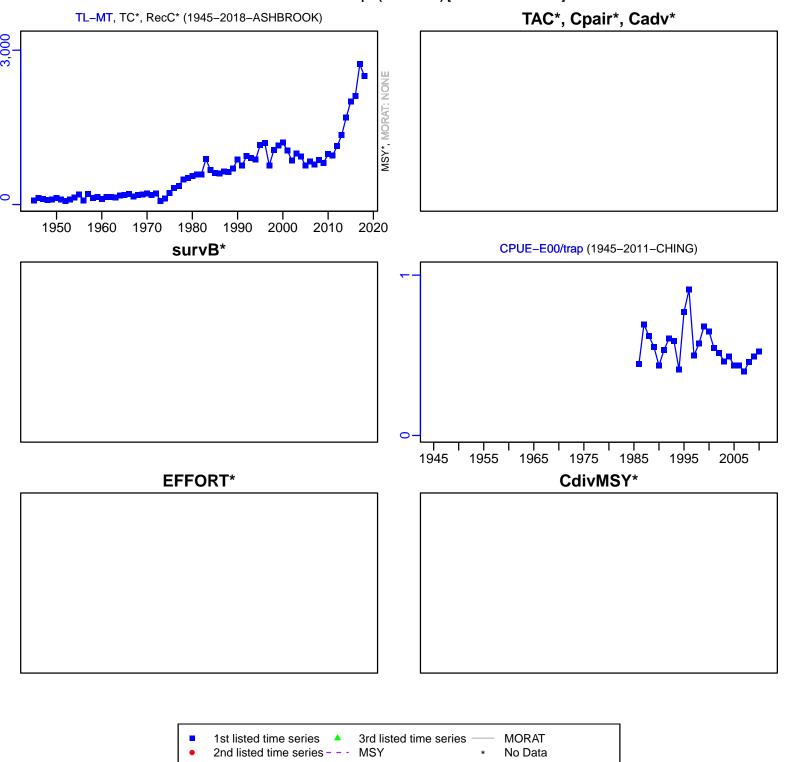
Metadata		
Scientific Name	Homarus americanus	
Current Assess ID	DFO-QUE-LOBSTERLFA19-21-1945-2018-ASHBROOK	
Area	Gaspe (LFA 19-21)	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2011, 2018	

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	2314		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Spannor Restain	1 1044511611
opannor reorait	
opannor recordic	
opannor nooran	
opannor nooran	
opannor nooran	

TB*	SSB*
TN *	F*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



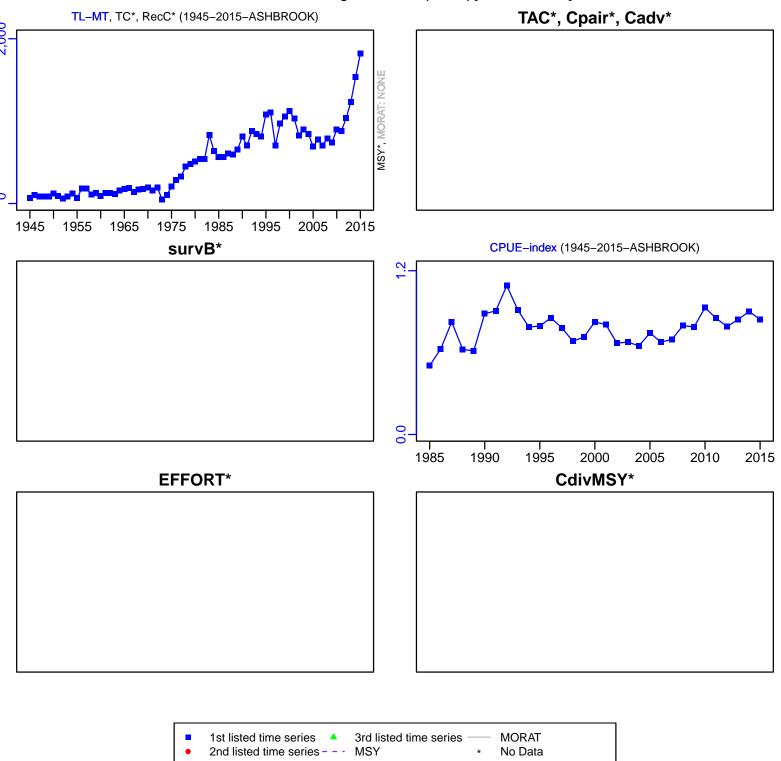
Metadata		
Scientific Name	Homarus americanus	
Current Assess ID	DFO-QUE-LOBSTERLFA22-1945-2015-ASHBROOK	
Area Magdalen Islands (LFA 22)		
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2011, 2015	

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

		Time Series	}		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	1796		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
FD.	D 14 . W
ER*	Recruits*
■ Listed time series Ta	proof PPD —— Poc. Ect
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



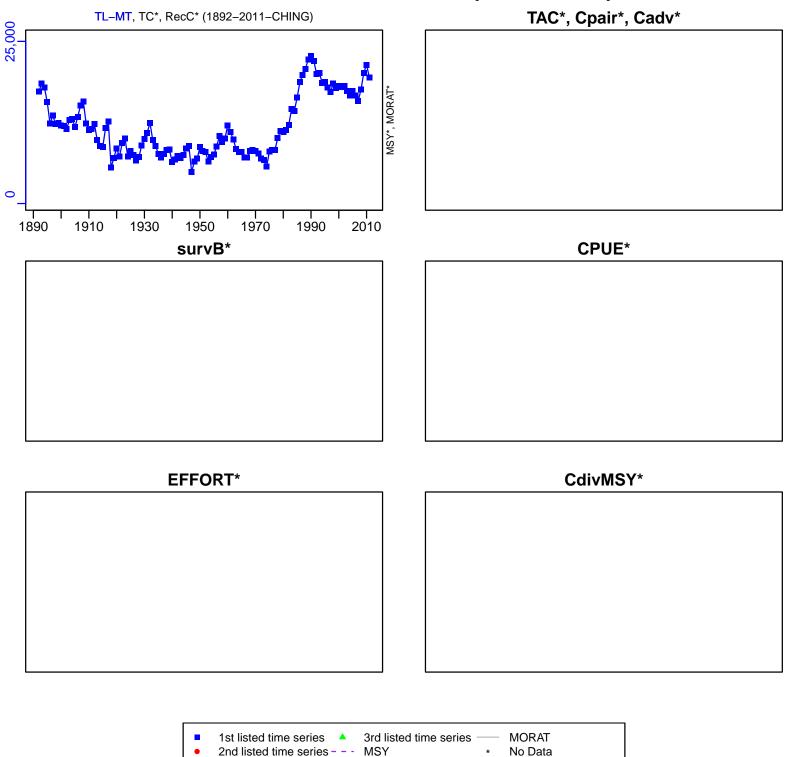
	Metadata
Scientific Name	Homarus americanus
Current Assess ID	DFO-SG-LOBSTERLFA23-26AB-1892-2011-CHING
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf Region
Asmts in RAM	2011

F	Refere	ence Points	
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

		Time Series	}		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2011	18,900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	<b>F</b> *
ER*	Recruits*
ER	Recruits
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	m BRP * No Data



# American lobster Atlantic Coast of Nova Scotia (LFA 27-33) [LOBSTERLFA27-33]

	Metadata
Scientific Name	Homarus americanus
Current Assess ID	DFO-MAR-LOBSTERLFA27-33-1980-2010-CHING
Area	Atlantic Coast of Nova Scotia (LFA 27-33)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2010

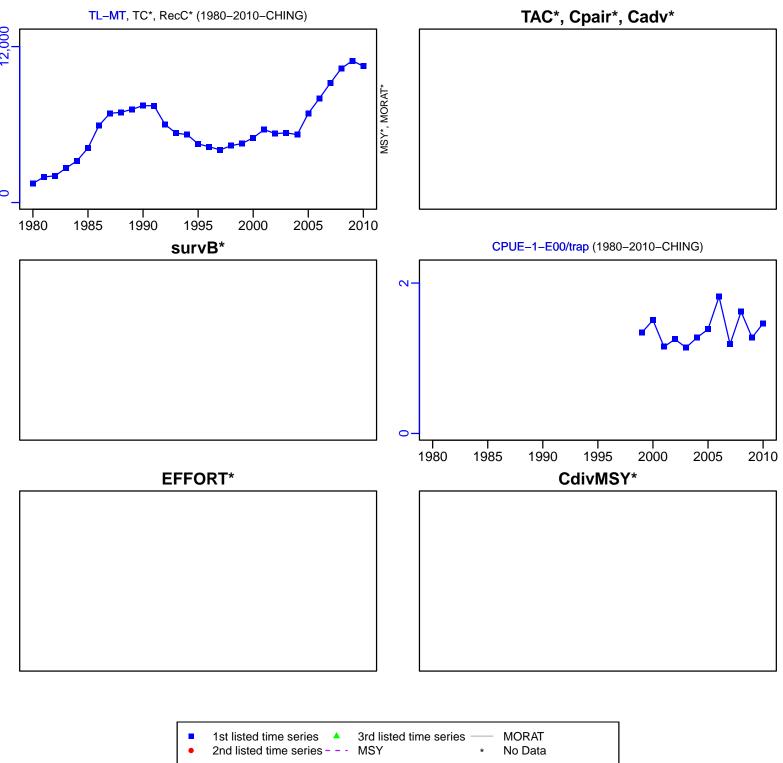
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-		-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

		Time Series	}		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	9810		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
O D !#	Dua desation#
Spawner Recruit*	Production*
Spawner Recruit <sup>*</sup>	Production*
Spawner Recruit <sup>*</sup>	Production
Spawner Recruit*	Production*
Spawner Recruit*	Production*

American lobster Atlantic Coast of Nova Scotia (LFA 27-33) [LOBSTERLFA27-33]

TB*	SSB*
TN *	F*
ER*	Recruits*
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data



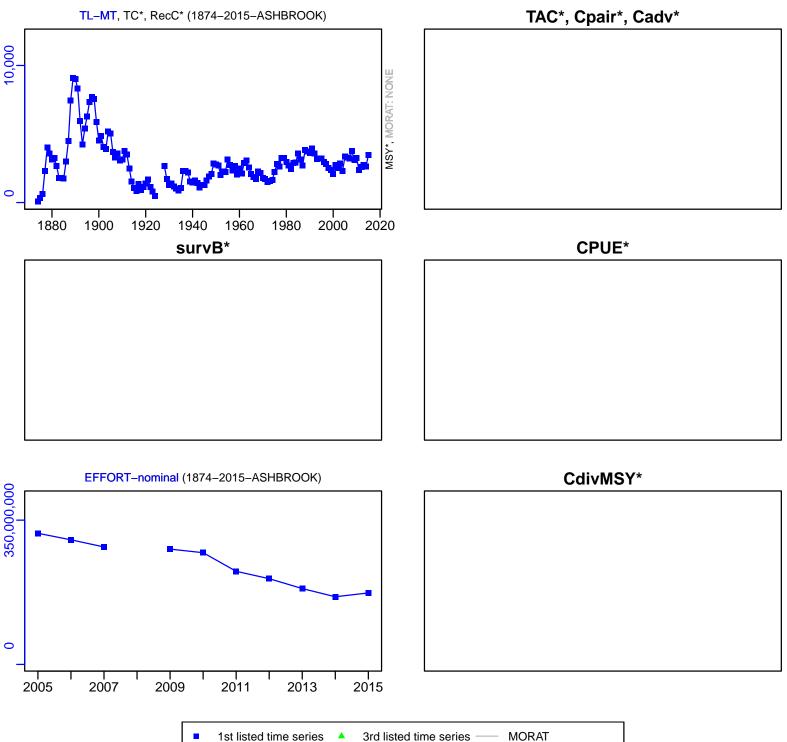
Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-LOBSTERLFA3-14-1874-2015-ASHBROOK
Area	Lobster Fishing Areas 3-14
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2015, 2012

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	2839		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



No Data

2nd listed time series - - -

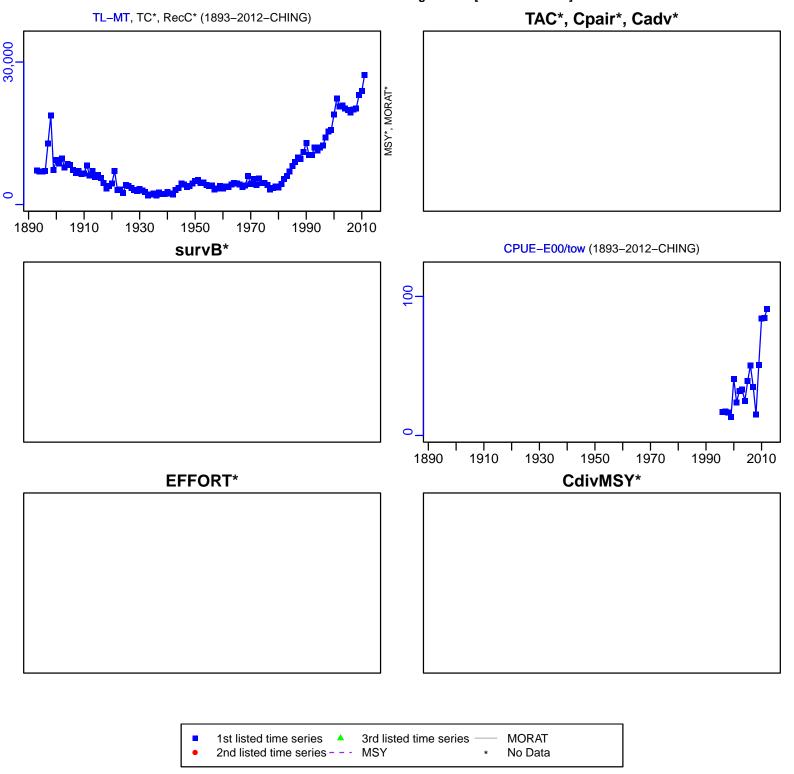
Metadata		
Scientific Name	Homarus americanus	
Current Assess ID	DFO-MAR-LOBSTERLFA34-1893-2012-CHING	
Area	Lobster Fishing Area 34	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Maritimes Region	
Asmts in RAM	2012	

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2012	23,300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



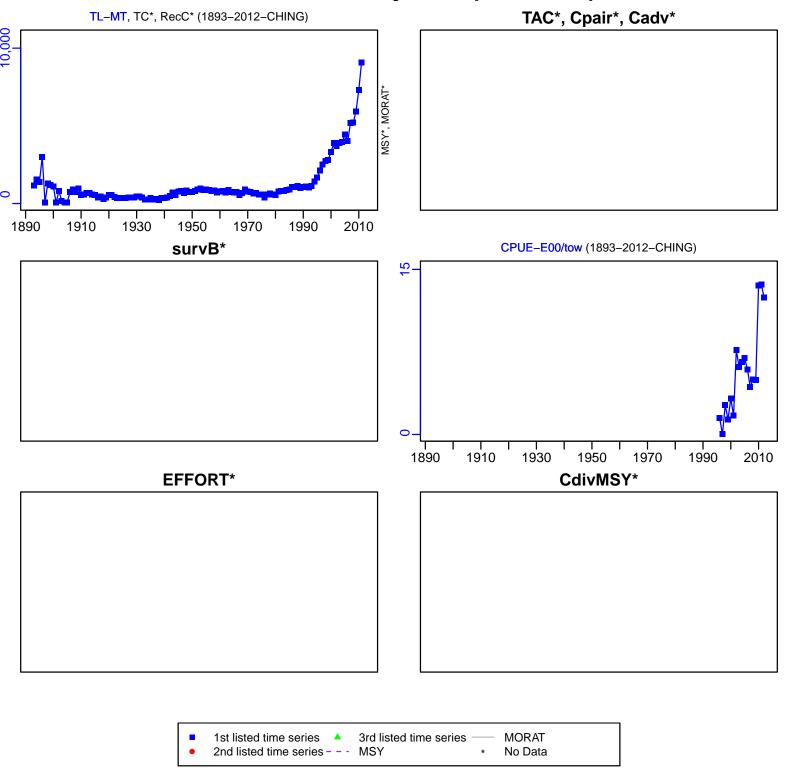
Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-MAR-LOBSTERLFA35-38-1893-2012-CHING
Area	Lobster Fishing Areas 35-38
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2012

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2012	8470		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ER*	Recruits*
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data



Metadata			
Scientific Name	Homarus americanus		
Current Assess ID	DFO-MAR-LOBSTERLFA41-1969-2016-ASHBROOK		
Area	Lobster Fishing Area 41		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2012, 2016		

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2012	654		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

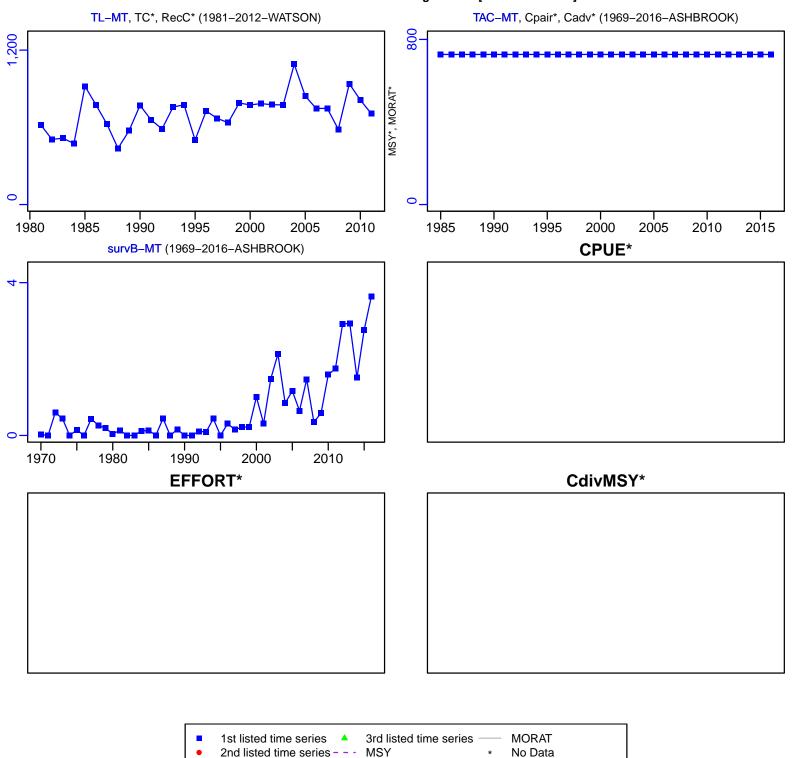
## American lobster Lobster Fishing Area 41 [LOBSTERLFA41]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

## American lobster Lobster Fishing Area 41 [LOBSTERLFA41]

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data

### American lobster Lobster Fishing Area 41 [LOBSTERLFA41]



## Lumpfish Northern Gulf of St. Lawrence [LUMP3Pn4RS]

Metadata		
Scientific Name	Cyclopterus lumpus	
Current Assess ID	DFO-QUE-LUMP3Pn4RS-1970-2015-ASHBROOK	
Area Northern Gulf of St. Lawrence		
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2015	

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

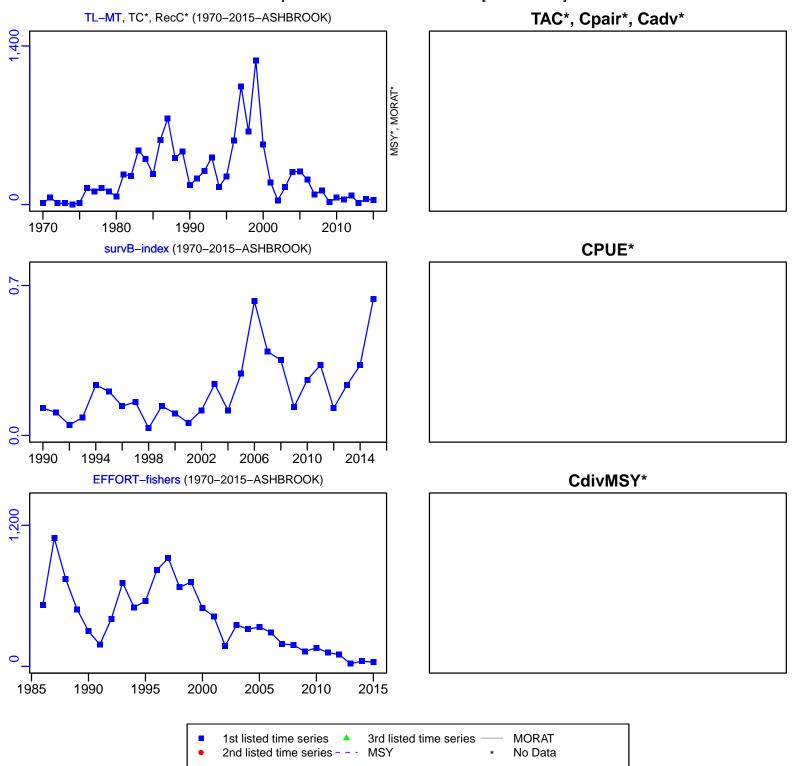
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	36		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

### Lumpfish Northern Gulf of St. Lawrence [LUMP3Pn4RS]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

## Lumpfish Northern Gulf of St. Lawrence [LUMP3Pn4RS]

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data

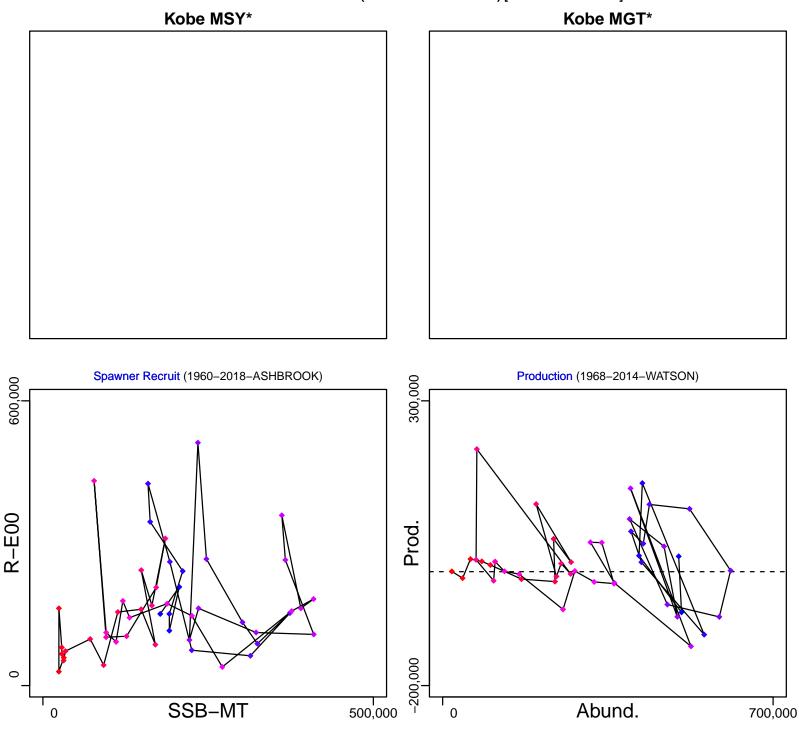


# Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

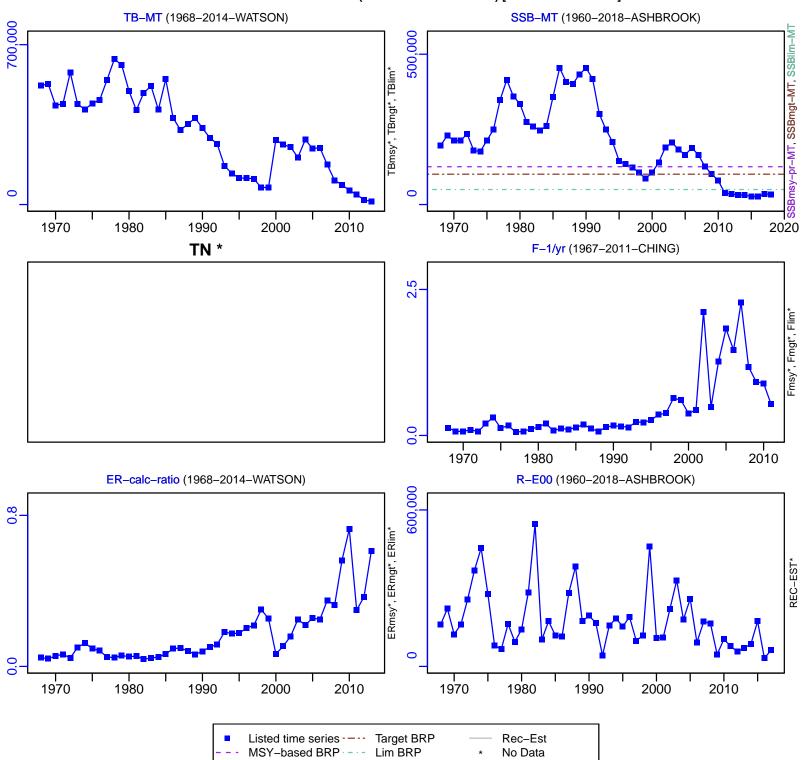
Metadata		
Scientific Name	Scomber scombrus	
Current Assess ID	DFO-QUE-MACKNWATLSA3-4-1960-2018-ASHBROOK	
Area	Northwest Atlantic (NAFO Subareas 3 and 4)	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2014, 2018, 2011	

Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-MT	2018	113,292
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	90,943
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	45,041
Flim	-	-	-
ERlim	-	-	-

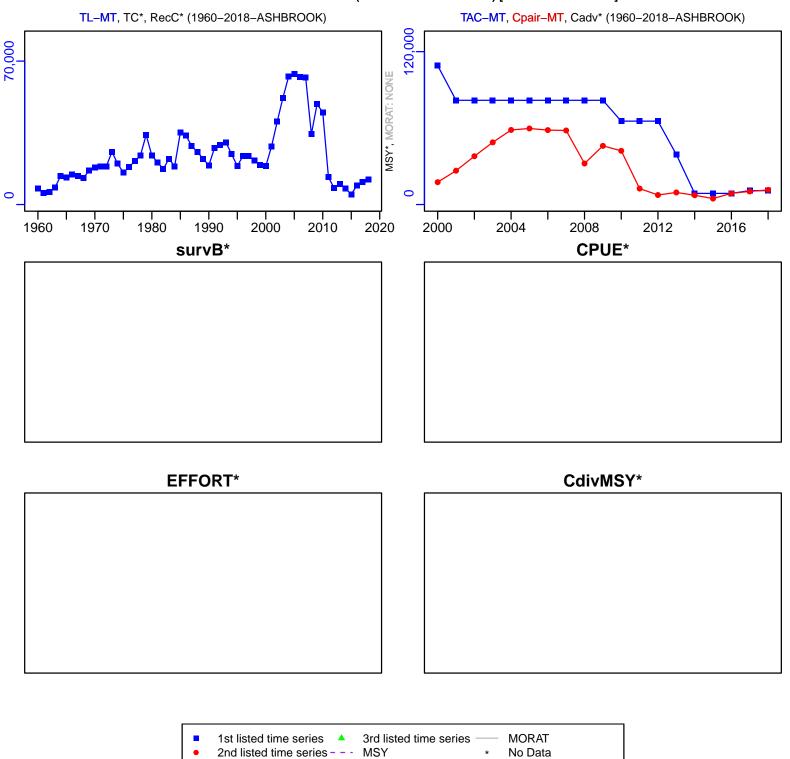
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2014	13,400	-	-
SSB	SSB-MT	2018	30,468	-	10-May
TN	-	-	-	-	-
R	R-E00	2018	58,824	-	1
F	F-1/yr	2011	0.468	-	8+
ER	ER-calc-ratio	2014	0.554	-	-
TC	-	-	-		
TL	TL-MT	2018	10,499		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2018	0.269		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.335		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



#### Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]



### Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]



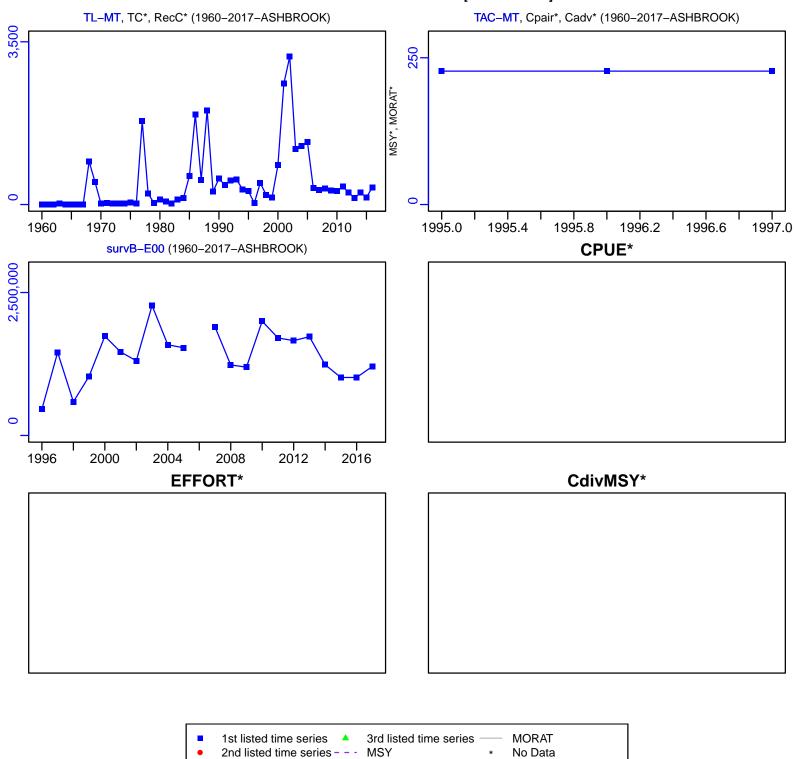
Metadata		
Scientific Name	Lophius americanus	
Current Assess ID	DFO-NFLD-MONK3LNOPs-1960-2017-ASHBROOK	
Area	NAFO Divisions 3LNOPs	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Newfoundland Region	
Asmts in RAM	2017	

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

		Time Series	<b>)</b>		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	360		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



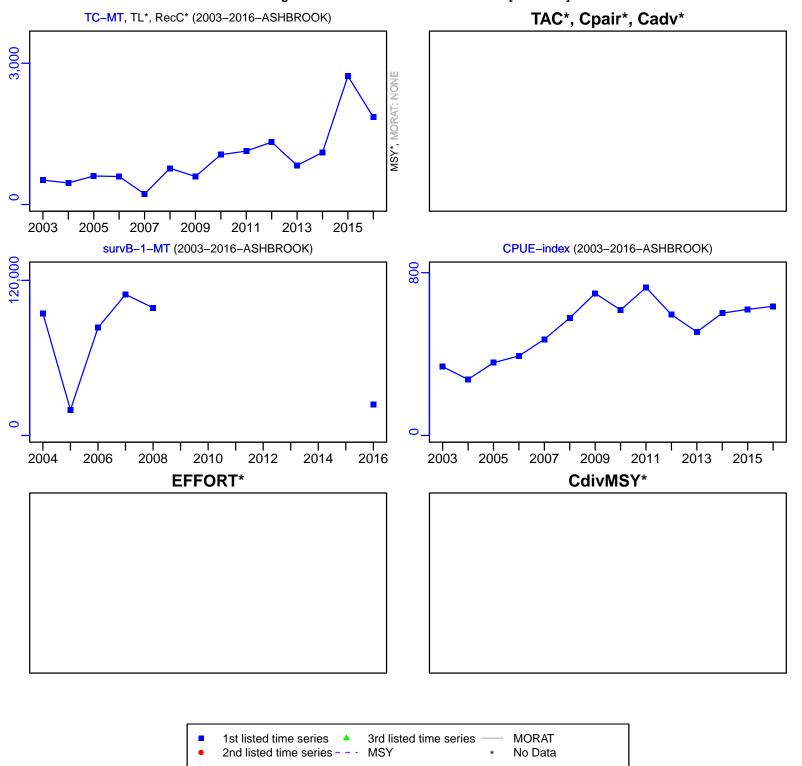
	Metadata
Scientific Name	Cucumaria frondosa
Current Assess ID	DFO-NFLD-OFSC3Ps-2003-2016-ASHBROOK
Area	St. Pierre Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Newfoundland Region
Asmts in RAM	2016

F	Refere	ence Points	
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

		Time Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	1571		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



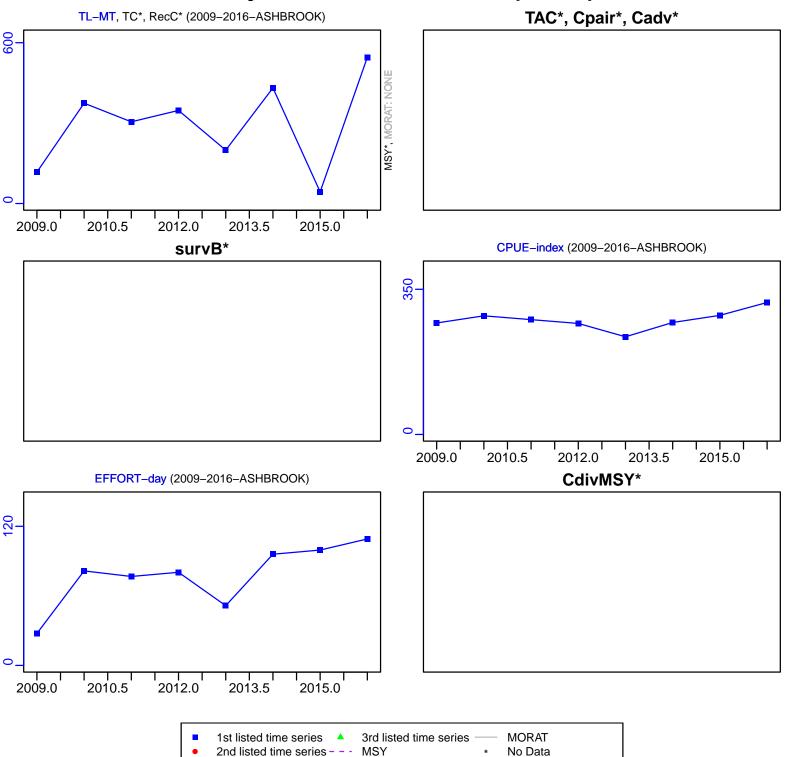
	Metadata
Scientific Name	Cucumaria frondosa
Current Assess ID	DFO-QUE-OFSCIQCU3-2009-2016-ASHBROOK
Area	Inshore Quebec Unit 3
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2016

F	Refere	ence Points	
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

		Time Series	}		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	526		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
<u> </u>	
•	

TB*	SSB*
TN *	F*
FD.	D 14 . W
ER*	Recruits*
■ Listed time series Ta	proof PPD —— Poc. Ect
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



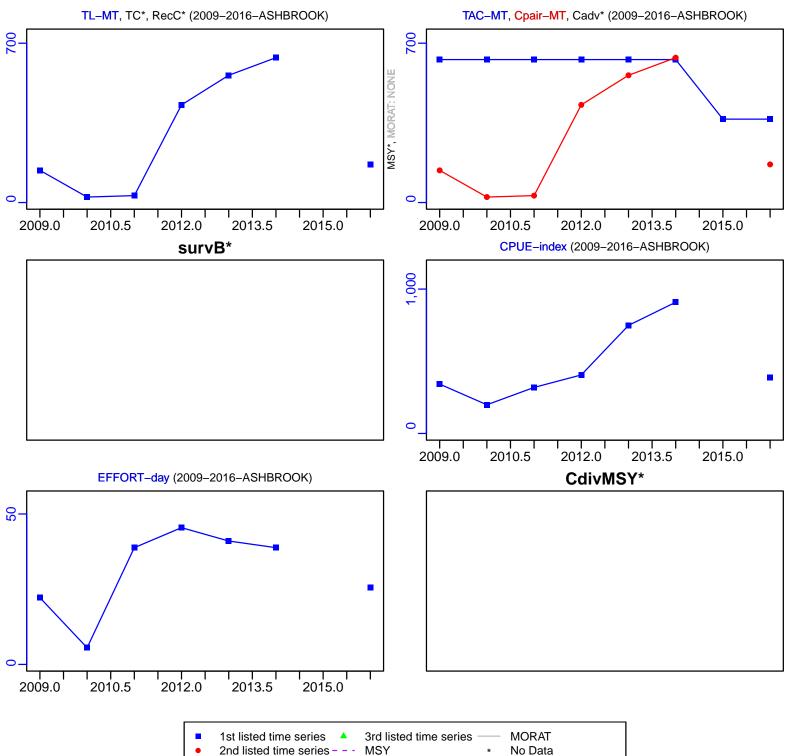
Metadata	
Scientific Name	Cucumaria frondosa
Current Assess ID	DFO-QUE-OFSCIQCUB-2009-2016-ASHBROOK
Area	Inshore Quebec Unit B
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2016

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	160		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
O	Production*
Spawner Recruit*	Production
Spawner Recruit <sup>*</sup>	Production
Spawner Recruit <sup>*</sup>	Production
Spawner Recruit*	

TB*	SSB*
TN *	F*
FD.	D 14 . W
ER*	Recruits*
■ Listed time series Ta	proof PPD —— Poc. Ect
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



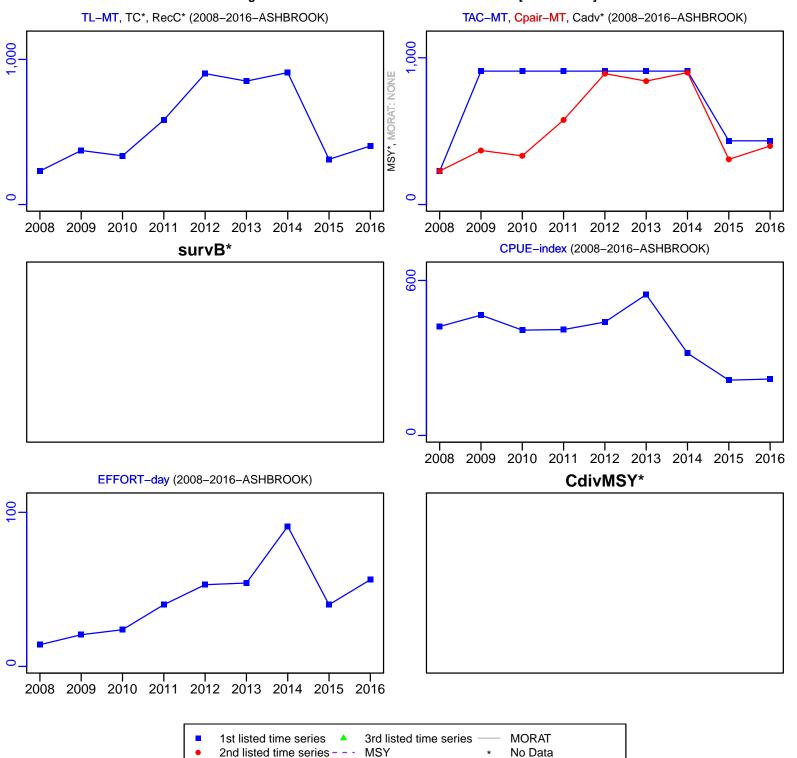
Metadata	
Scientific Name	Cucumaria frondosa
Current Assess ID	DFO-QUE-OFSCIQCUC-2008-2016-ASHBROOK
Area	Inshore Quebec Unit C
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2016

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	351		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
O	Production*
Spawner Recruit*	Production
Spawner Recruit <sup>*</sup>	Production
Spawner Recruit <sup>*</sup>	Production
Spawner Recruit*	

TB*	SSB*
TN *	F*
FD.	D 14 . W
ER*	Recruits*
■ Listed time series Ta	proof PPD —— Poc. Ect
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



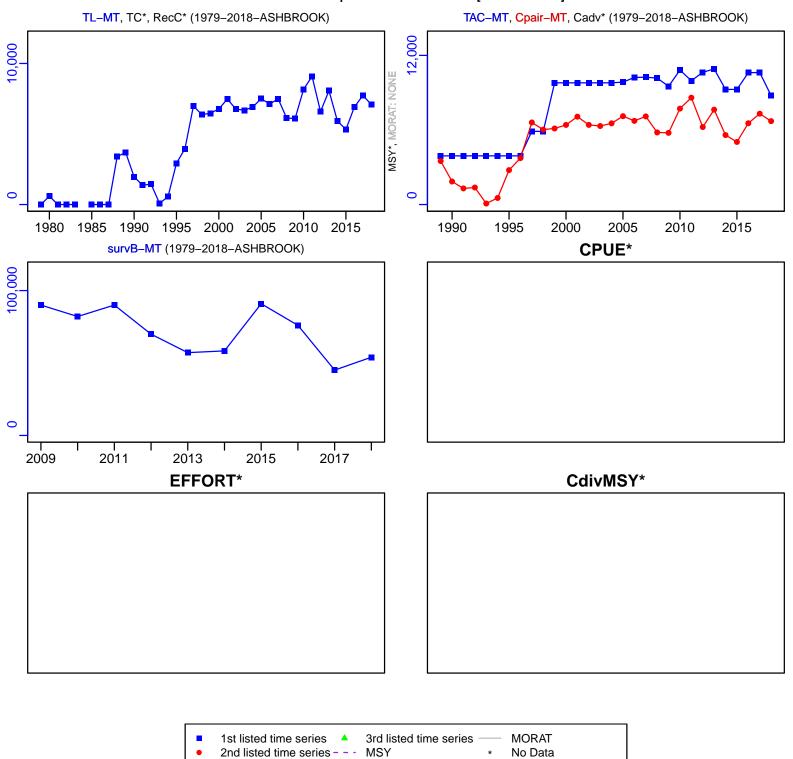
Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	DFO-ARCTIC-PANDALNUNE-1979-2018-ASHBROOK
Area	Nunavut/Nunavik East
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Arctic Region
Asmts in RAM	2018

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	6000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
FD.	D 14 . W
ER*	Recruits*
■ Listed time series Ta	proof PPD —— Poc. Ect
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



Metadata			
Scientific Name	Pandalus borealis		
Current Assess ID	DFO-ARCTIC-PANDALNUNW-2006-2018-ASHBROOK		
Area	Nunavut/Nunavik West		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Arctic Region		
Asmts in RAM	2018		

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	1307		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

### Northern shrimp Nunavut/Nunavik West [PANDALNUNW]

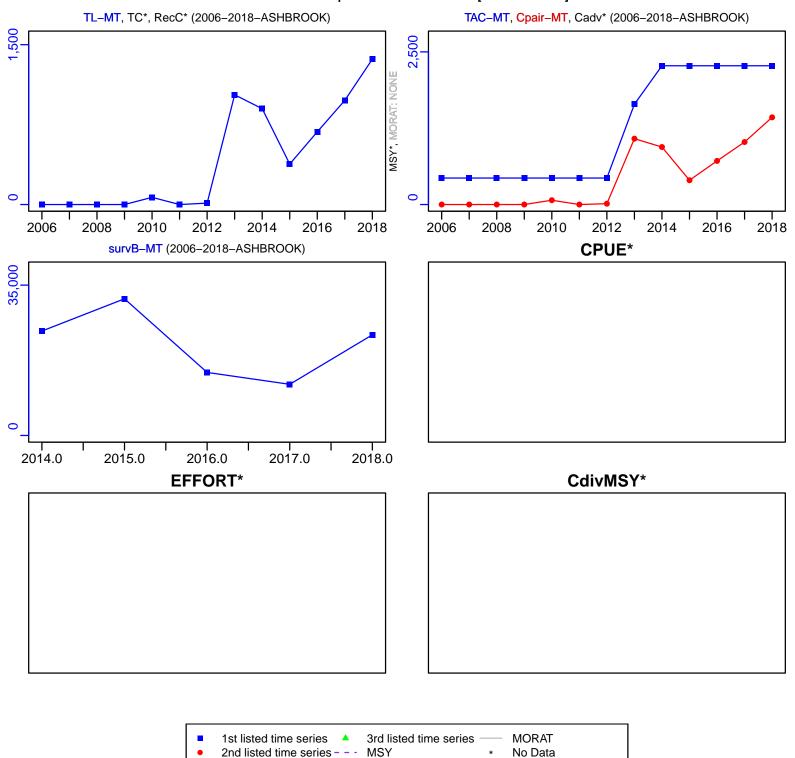
Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data

## Northern shrimp Nunavut/Nunavik West [PANDALNUNW]

TB*	SSB*
TN *	<b>F</b> *
ER*	Recruits*
Listed time series Ta MSY-based BRP Li	arget BRP — Rec–Est m BRP * No Data

#### Northern shrimp Nunavut/Nunavik West [PANDALNUNW]



Metadata		
Scientific Name	Pandalus borealis	
Current Assess ID	DFO-QUE-PANDALSFA10-1974-2017-ASHBROOK	
Area	Shrimp Fishing Area 10	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2017	

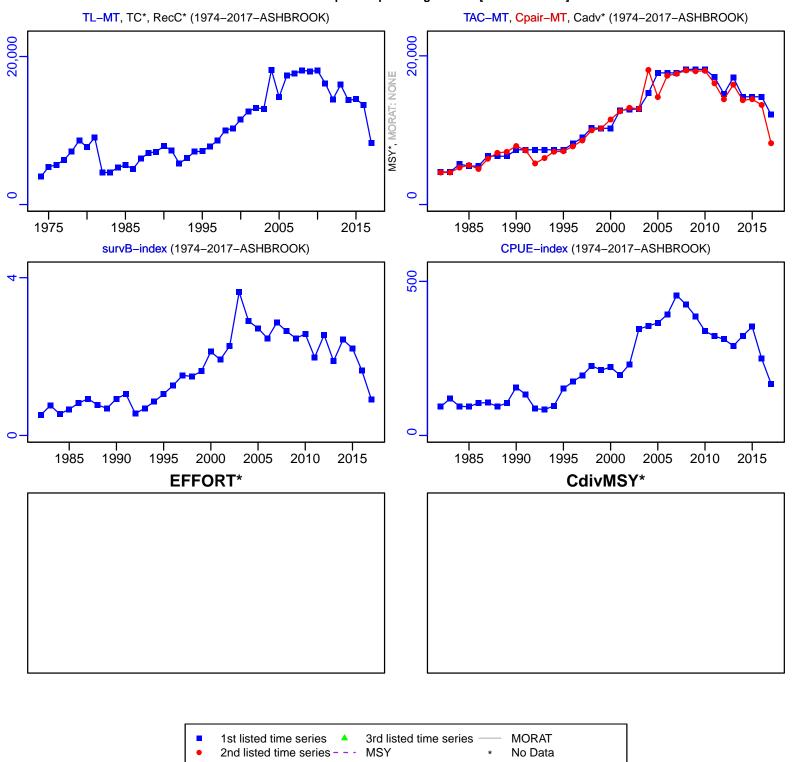
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	7352		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Opawner rectuit	1 Toddotton
Opawner Recordit	
Opawner recordit	
Opawner recordit	
Opawner receruit	
Opawner receruit	

◆ Start Year ◆ End Year \* No Data

TB*	SSB*
TN *	F*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



Metadata		
Scientific Name	Pandalus borealis	
Current Assess ID	DFO-QUE-PANDALSFA12-1980-2017-ASHBROOK	
Area	Shrimp Fishing Area 12	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2017	

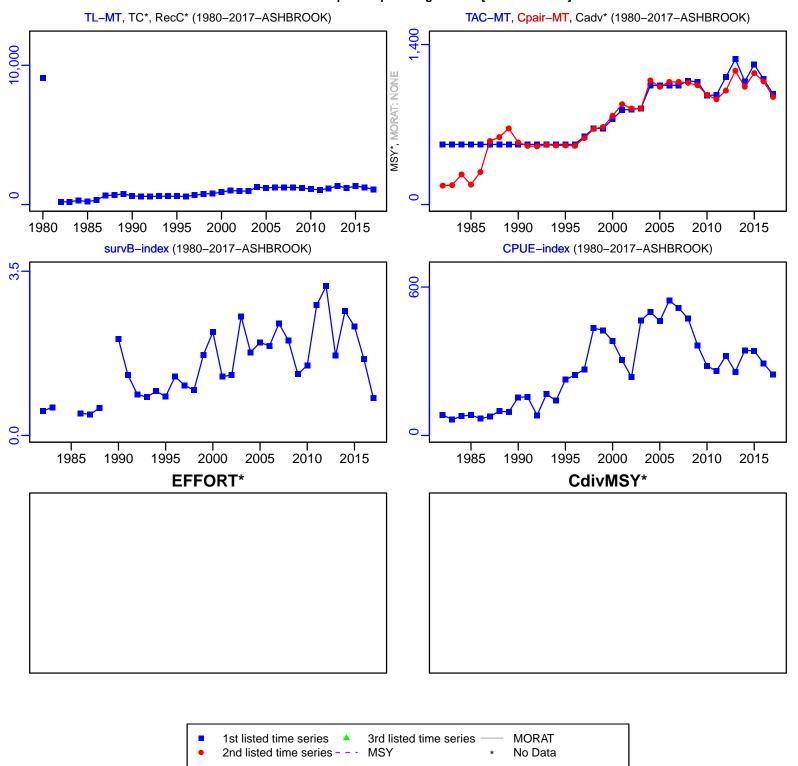
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	903		
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*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data

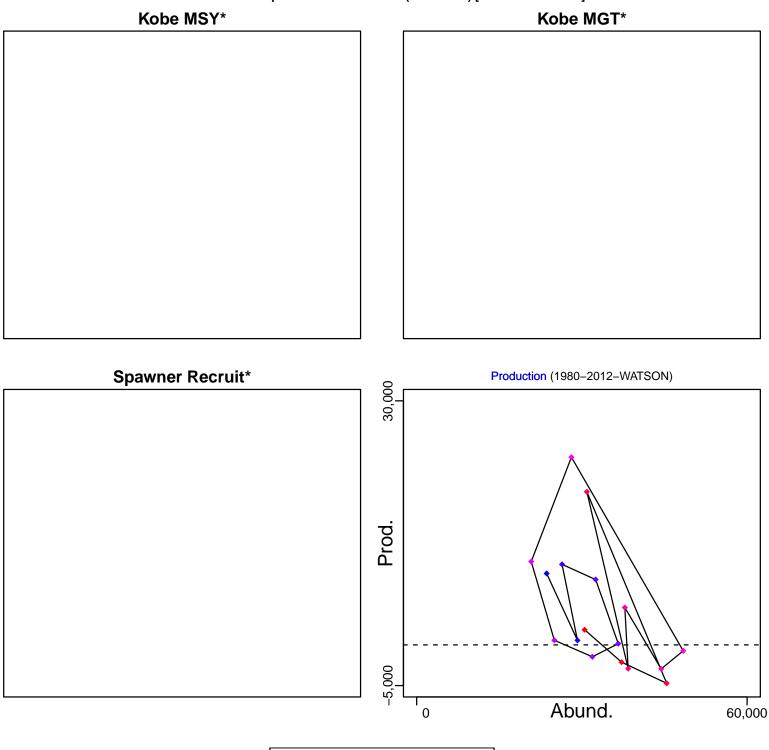


# Northern shrimp Eastern Scotian Shelf (SFA 13-15) [PANDALSFA13-15]

Metadata			
Scientific Name	Pandalus borealis		
Current Assess ID	DFO-MAR-PANDALSFA13-15-1979-2018-ASHBROOK		
Area Eastern Scotian Shelf (SFA 13-15)			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2011, 2018, 2012		

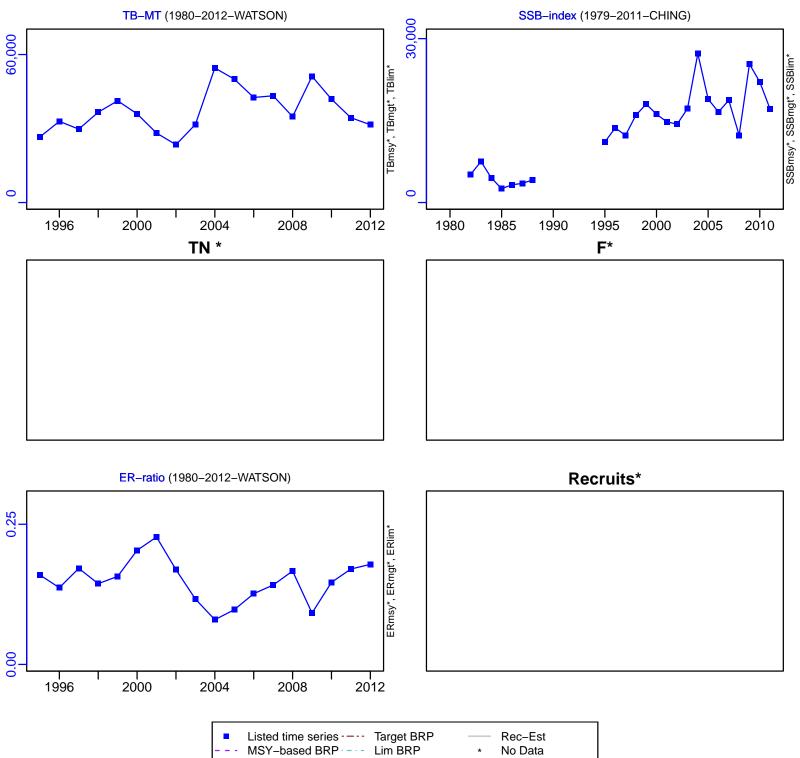
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

	Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2012	28,000	-	-	
SSB	SSB-index	2011	16,800	Females	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2012	0.15	Both	-	
TC	TC-MT	2012	3650			
TL	TL-MT	2018	2400			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			



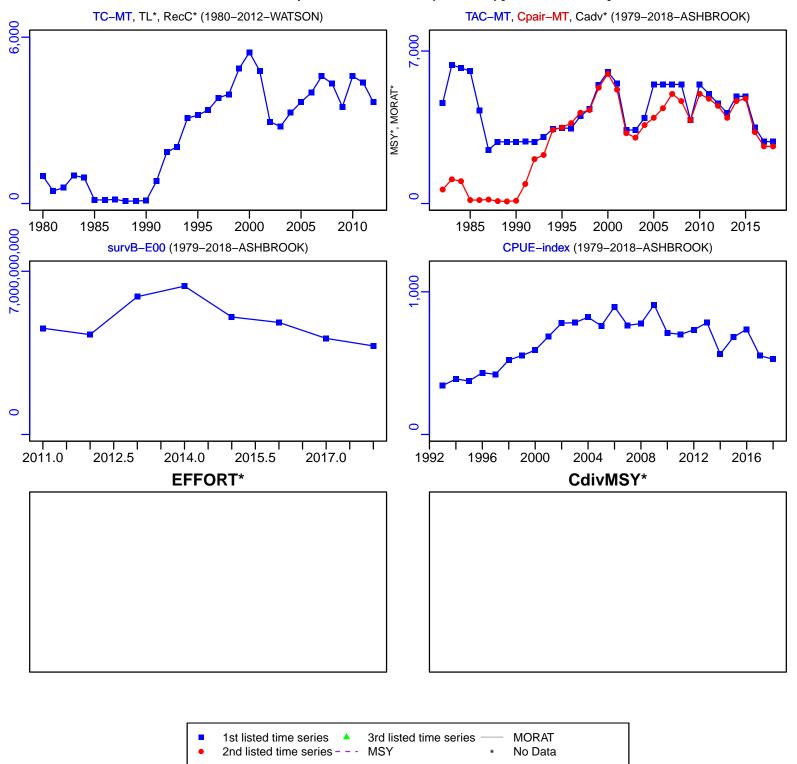
Start Year → End Year → No Data

### Northern shrimp Eastern Scotian Shelf (SFA 13-15) [PANDALSFA13-15]



No Data

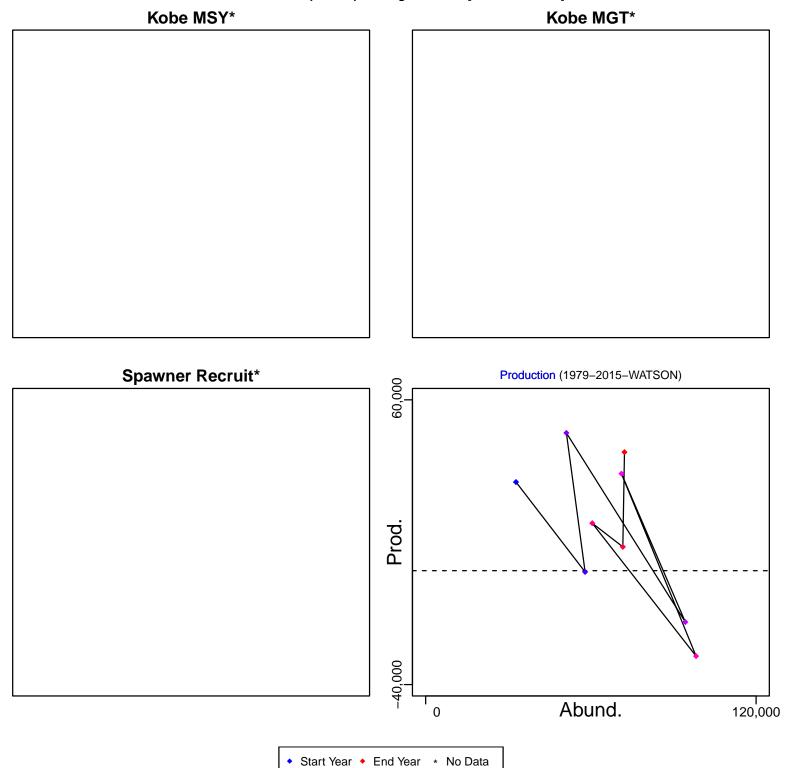
### Northern shrimp Eastern Scotian Shelf (SFA 13-15) [PANDALSFA13-15]

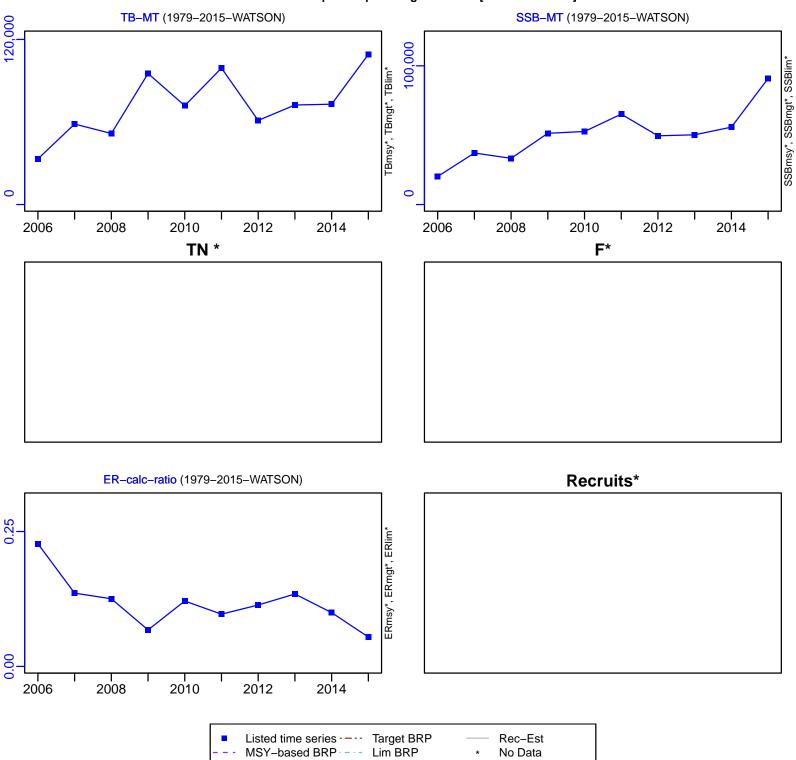


Metadata			
Scientific Name	Pandalus borealis		
Current Assess ID DFO-ARCTIC-PANDALSFA2-3-1979-2015-WATSON			
Area Shrimp Fishing Areas 2-3			
Management Authority   Department of Fisheries and Oceans, Canada national managem			
Assessor	Department of Fisheries and Oceans - Arctic Region		
Asmts in RAM	2015, 2010		

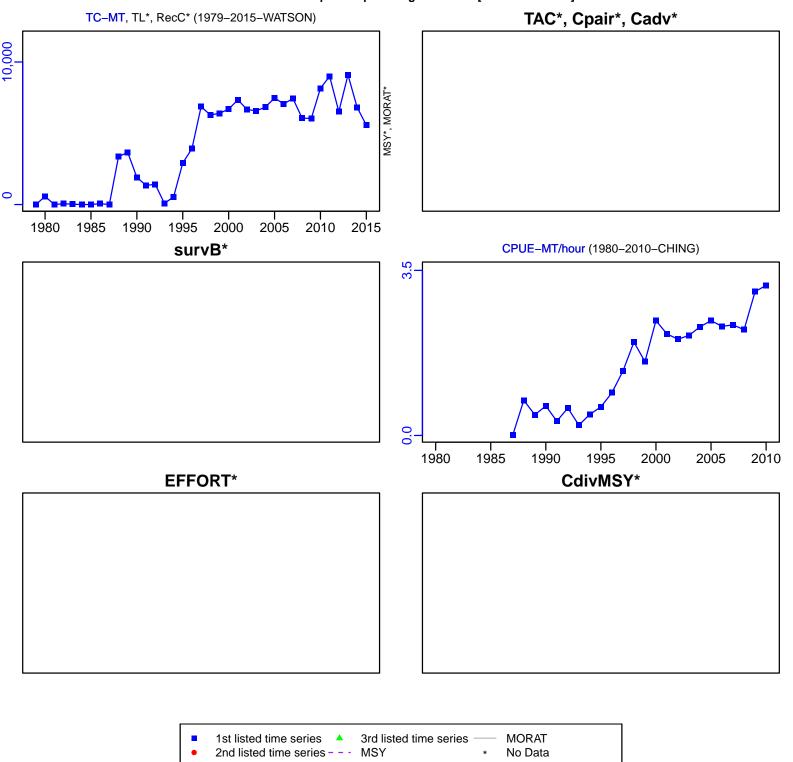
F	Reference Points				
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
M	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2015	108,000	-	-
SSB	SSB-MT	2015	75,600	Females	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2015	0.044	-	-
TC	TC-MT	2015	4760		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





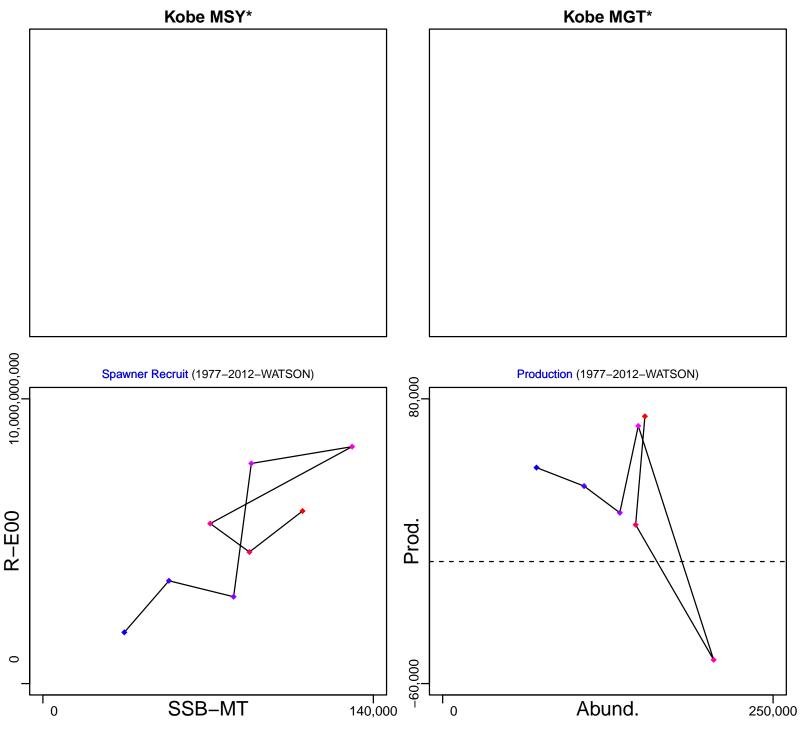
No Data



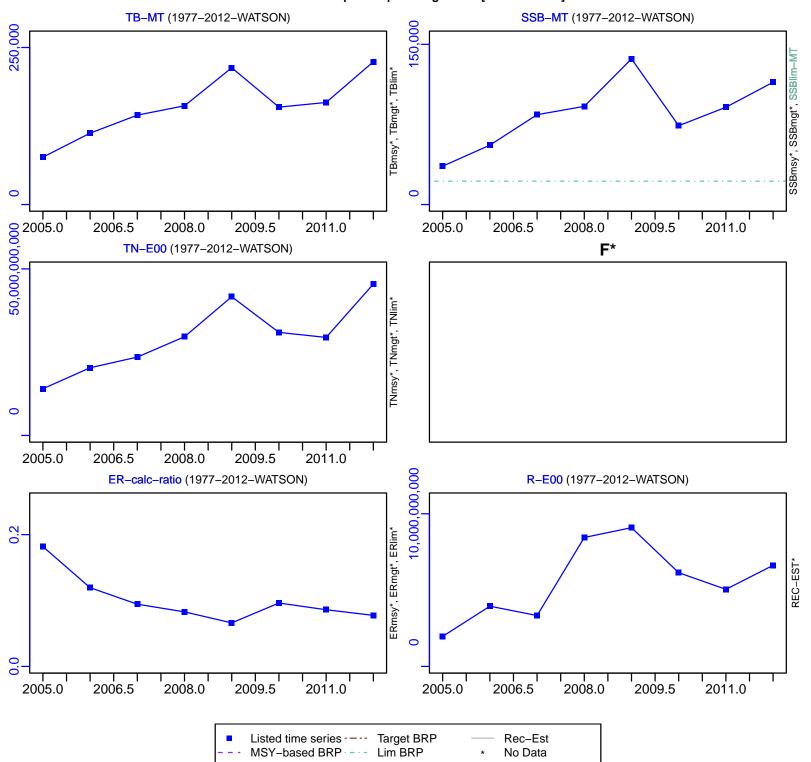
Metadata			
Scientific Name	Pandalus borealis		
Current Assess ID DFO-NFLD-PANDALSFA4-1978-2018-ASHBROOK			
Area Shrimp Fishing Area 4			
Management Authority Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Newfoundland Region		
Asmts in RAM	2018, 2012		

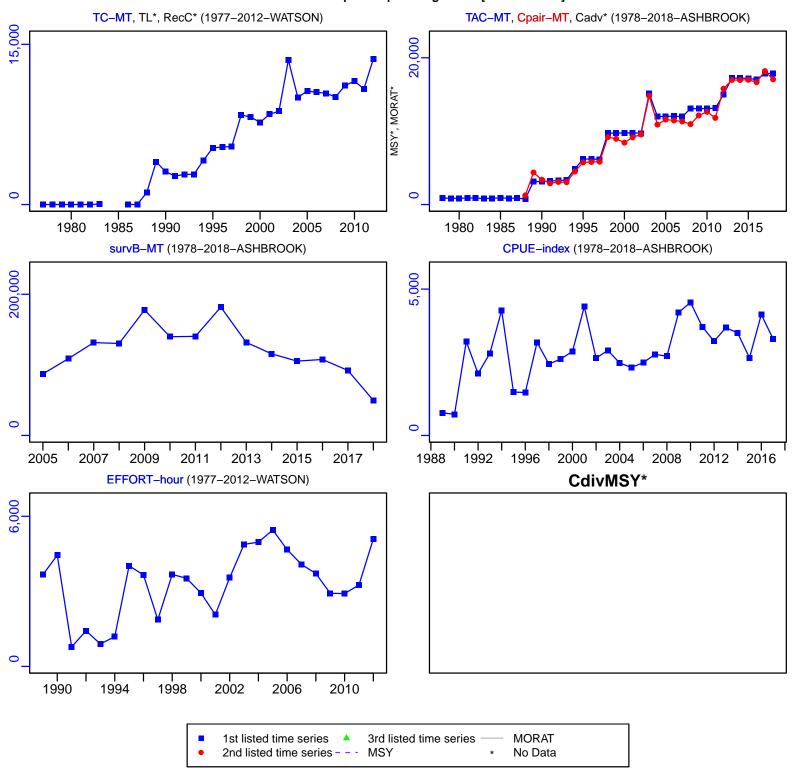
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-		
TBlim	-	-	-	
SSBlim	SSBlim-MT	2012	21,000	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2012	214,000	Both	-
SSB	SSB-MT	2012	110,000	-	-
TN	TN-E00	2012	$4.54 \times 10^{10}$	-	-
R	R-E00	2012	$6.06 \times 10^{9}$	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.061	-	-
TC	TC-MT	2012	13,100		
TL	TL-MT	2018	15,016		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	1	-	-		
ER/ERmsy	1	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Start Year ◆ End Year \* No Data

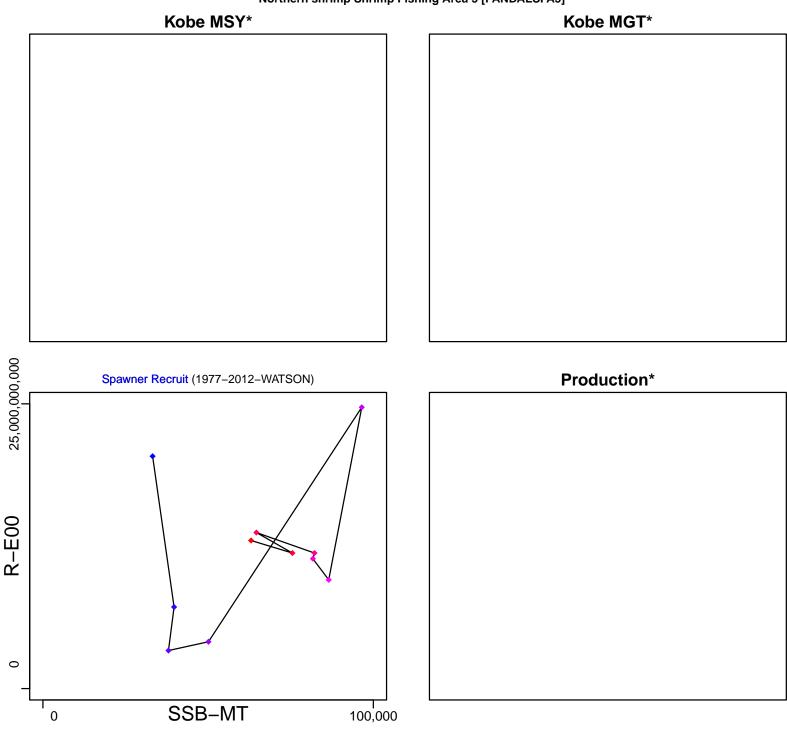




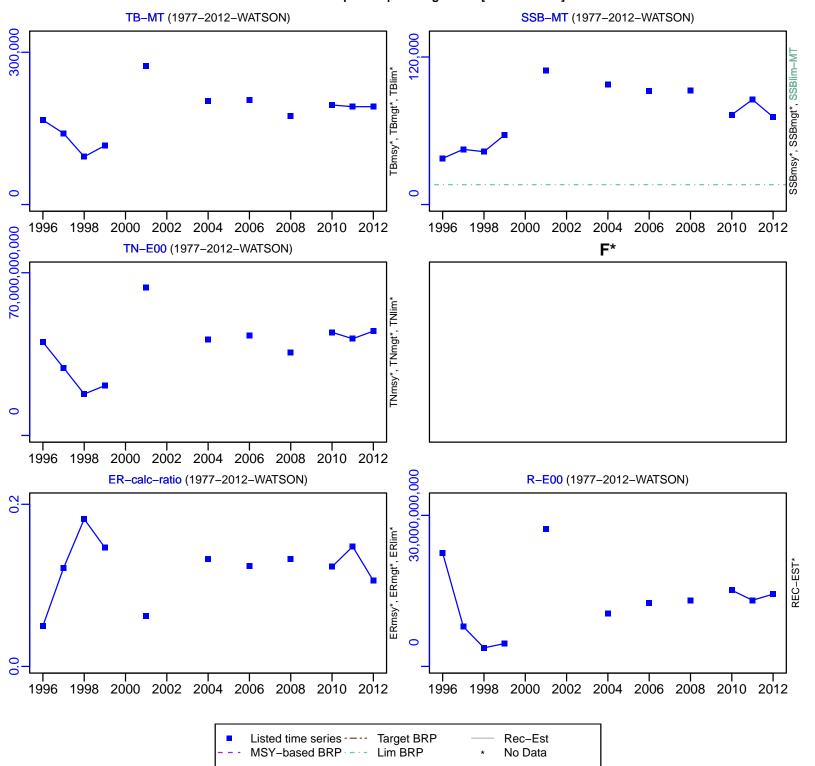
Metadata			
Scientific Name	Pandalus borealis		
Current Assess ID	DFO-NFLD-PANDALSFA5-1977-2018-ASHBROOK		
Area Shrimp Fishing Area 5			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Newfoundland Region		
Asmts in RAM	2018, 2012		

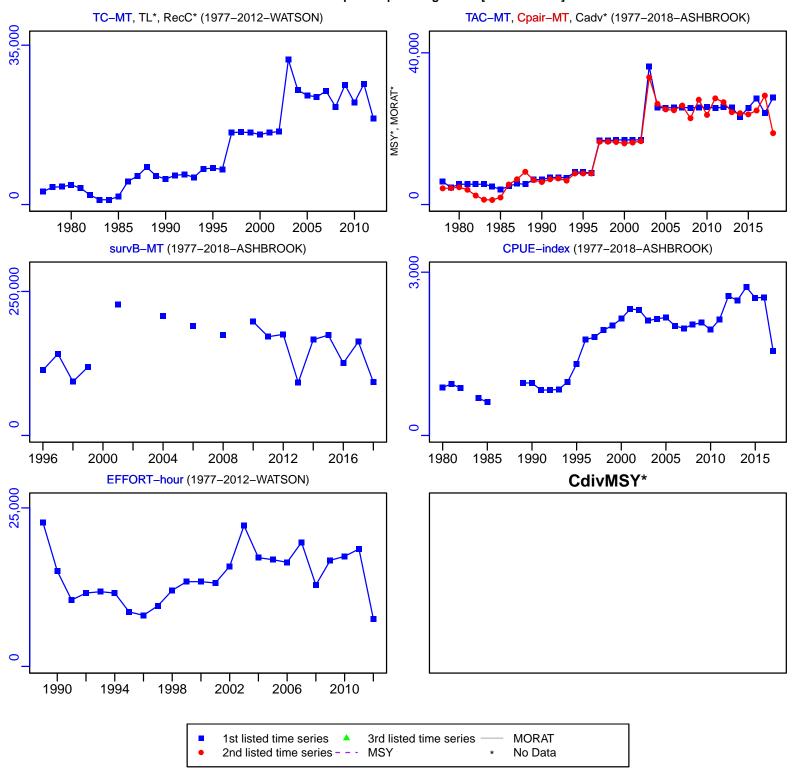
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2012	14,300	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2012	176,000	Both	-
SSB	SSB-MT	2012	63,000	-	-
TN	TN-E00	2012	$4.38 \times 10^{10}$	-	-
R	R-E00	2012	$1.3 \times 10^{10}$	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.103	-	-
TC	TC-MT	2012	18,100		
TL	TL-MT	2018	17,119		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Start Year • End Year \* No Data

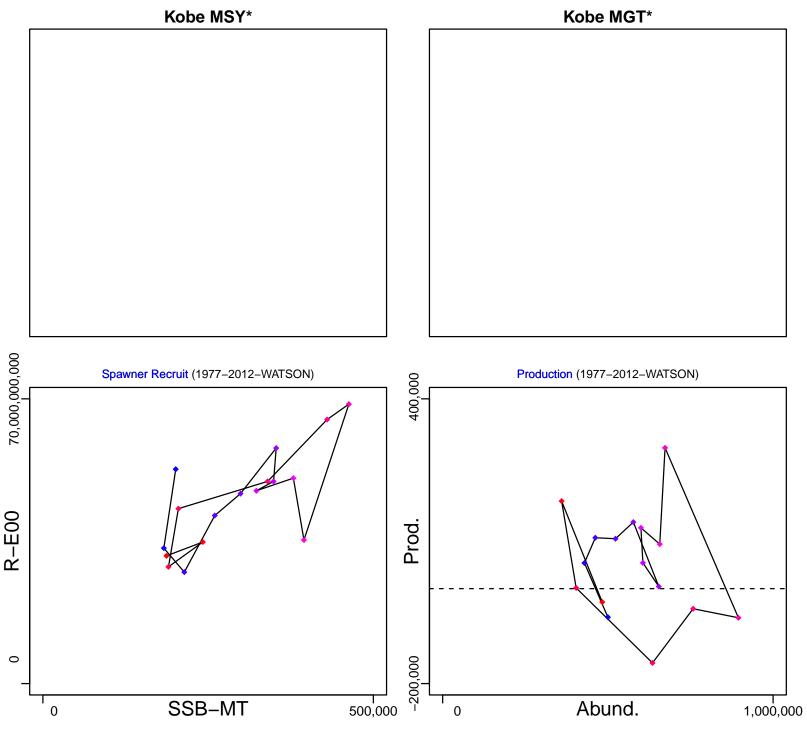




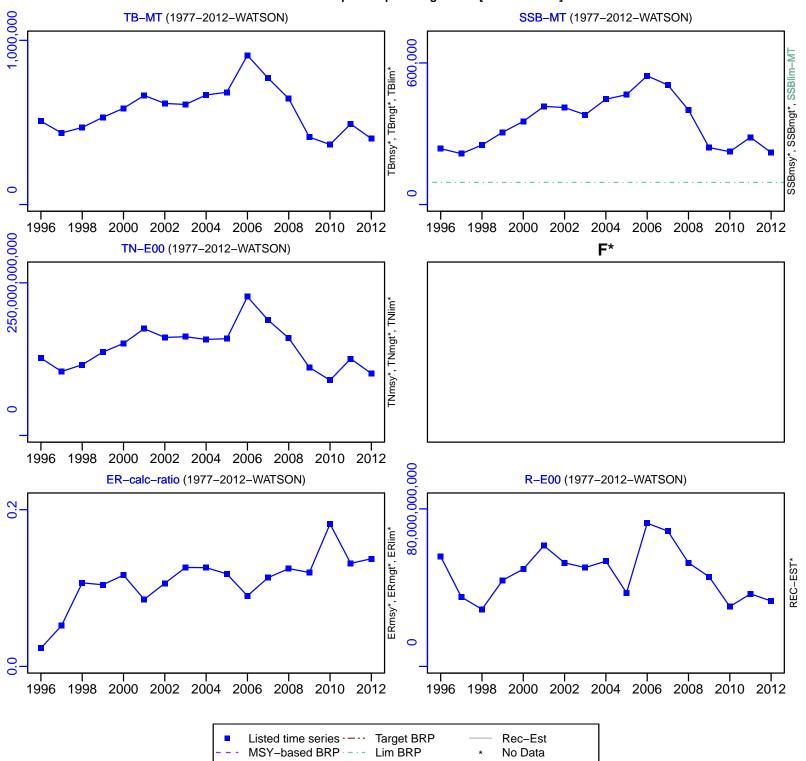
Metadata				
Scientific Name	Pandalus borealis			
Current Assess ID DFO-NFLD-PANDALSFA6-1977-2018-ASHBROOK				
Area Shrimp Fishing Area 6				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Newfoundland Region			
Asmts in RAM	2018, 2012			

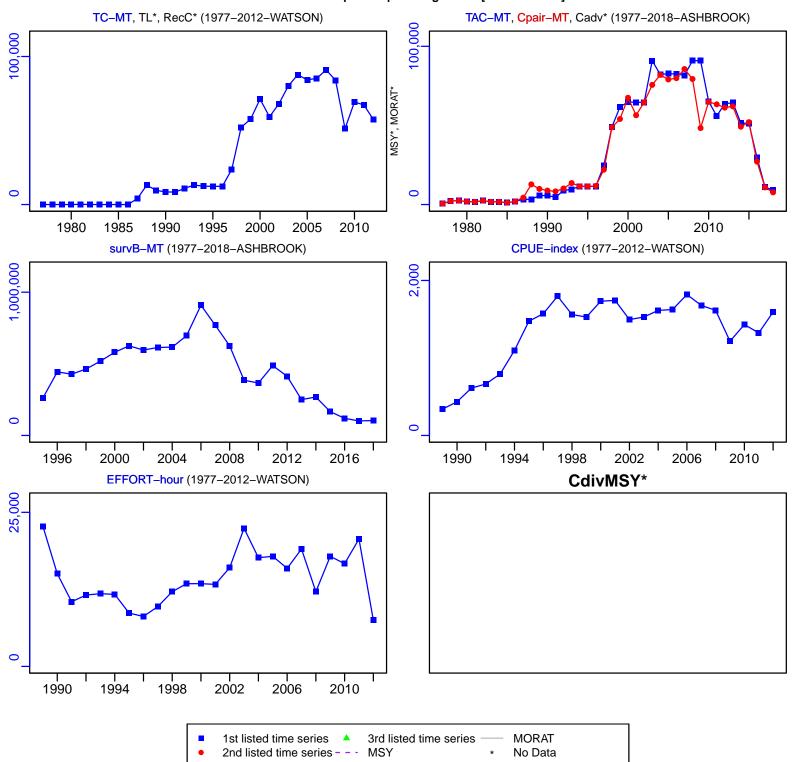
Reference Points						
Туре	ID	Asmt Year	Value			
TBmsy	-	-	-			
SSBmsy	-	-	-			
Fmsy	-	-	-			
ERmsy	-	-	-			
TBmgt	-	-	-			
SSBmgt	-	-	-			
Fmgt	-	-	-			
ERmgt	-	-	-			
TB0	-	-	-			
SSB0	-	-	-			
MSY	-	-	-			
M	-	-	-			
TBlim	-	-	-			
SSBlim	SSBlim-MT	2012	79,600			
Flim	-	-	-			
ERlim	-	-	-			

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2012	395,000	Both	-
SSB	SSB-MT	2012	187,000	-	-
TN	TN-E00	2012	$9.29 \times 10^{10}$	-	-
R	R-E00	2012	$3.14 \times 10^{10}$	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.129	-	-
TC	TC-MT	2012	51,000		
TL	TL-MT	2018	7300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Start Year ◆ End Year \* No Data





Metadata				
Scientific Name	Pandalus borealis			
Current Assess ID DFO-QUE-PANDALSFA8-1970-2017-ASHBROOK				
Area Shrimp Fishing Area 8				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Quebec Region			
Asmts in RAM	2017			

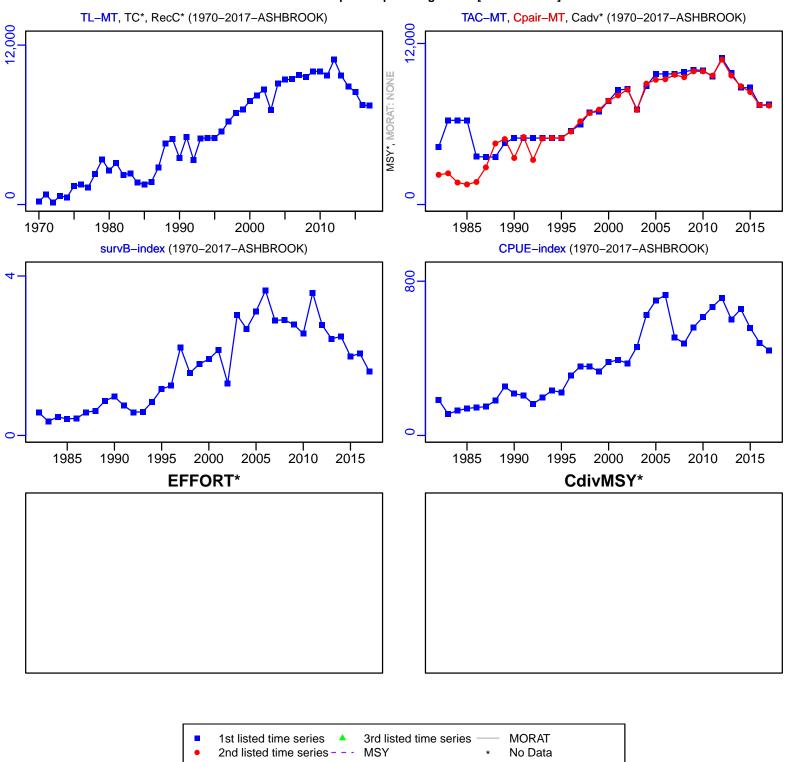
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	-	-	-			
TL	TL-MT	2017	7118			
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*
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta MSY-based BRP Li	im BRP * No Data



Metadata				
Scientific Name	Pandalus borealis			
Current Assess ID DFO-QUE-PANDALSFA9-1974-2017-ASHBROOK				
Area Shrimp Fishing Area 9				
Management Authority   Department of Fisheries and Oceans, Canada national manager				
Assessor Department of Fisheries and Oceans - Quebec Region				
Asmts in RAM	2017			

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

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	-	-	-			
TL	TL-MT	2017	7347			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

### Northern shrimp Shrimp Fishing Area 9 [PANDALSFA9]

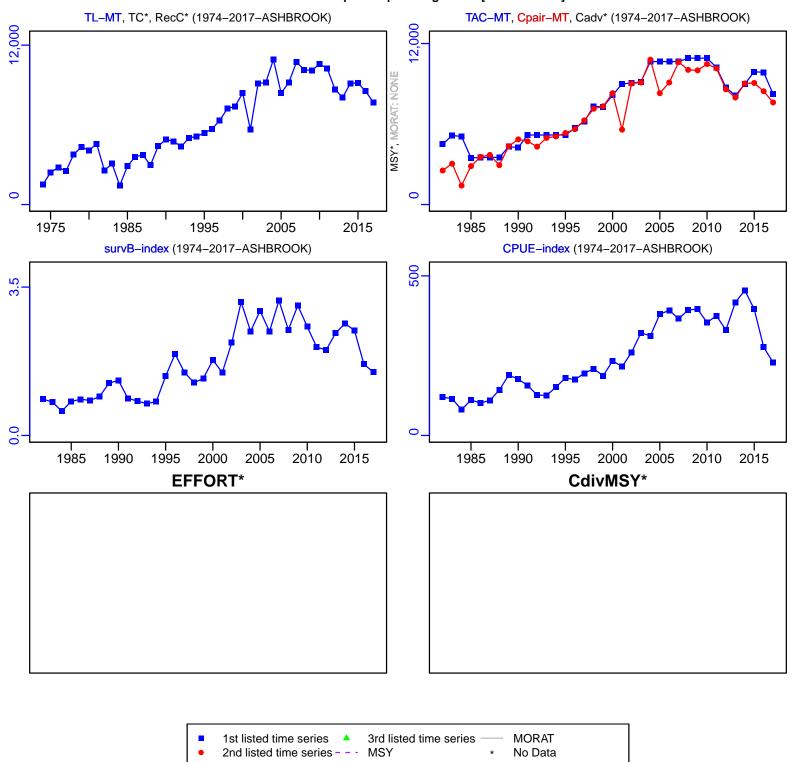
Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data

## Northern shrimp Shrimp Fishing Area 9 [PANDALSFA9]

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data

#### Northern shrimp Shrimp Fishing Area 9 [PANDALSFA9]



# Pollock St. Pierre Bank [POLL3Ps]

Metadata		
Scientific Name	Pollachius virens	
Current Assess ID	DFO-NFLD-POLL3Ps-1960-2018-ASHBROOK	
Area	St. Pierre Bank	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Assessor Department of Fisheries and Oceans - Newfoundland Region	
Asmts in RAM	2013, 2018	

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	650		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

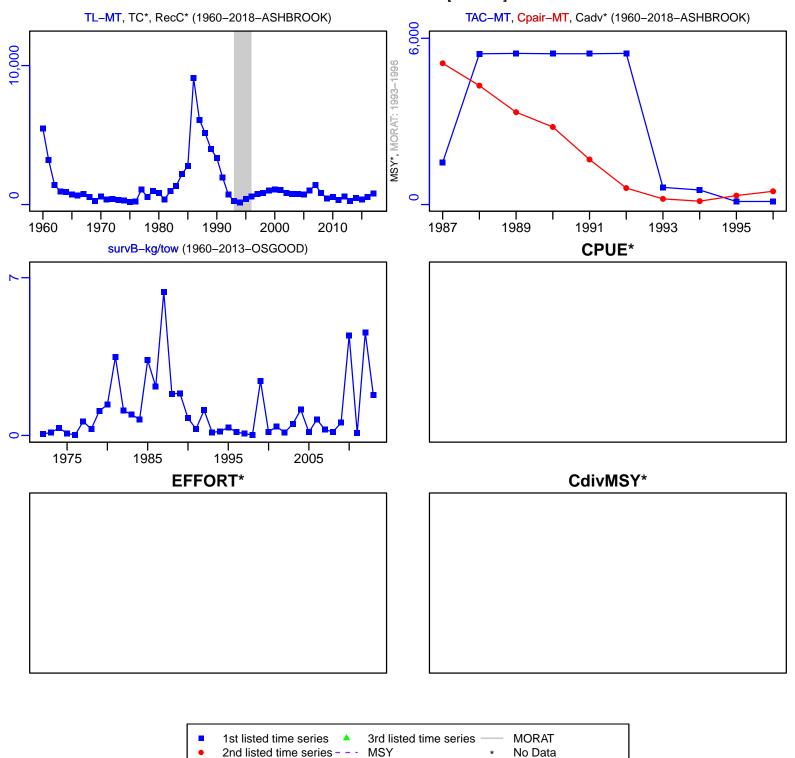
#### Pollock St. Pierre Bank [POLL3Ps]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Spawner Recruit	

◆ Start Year ◆ End Year \* No Data

## Pollock St. Pierre Bank [POLL3Ps]

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data



Metadata		
Scientific Name	Pollachius virens	
Current Assess ID	DFO-MAR-POLL4VWX-1982-2011-OSGOOD	
Area	Scotian Shelf and Bay of Fundy	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2011	

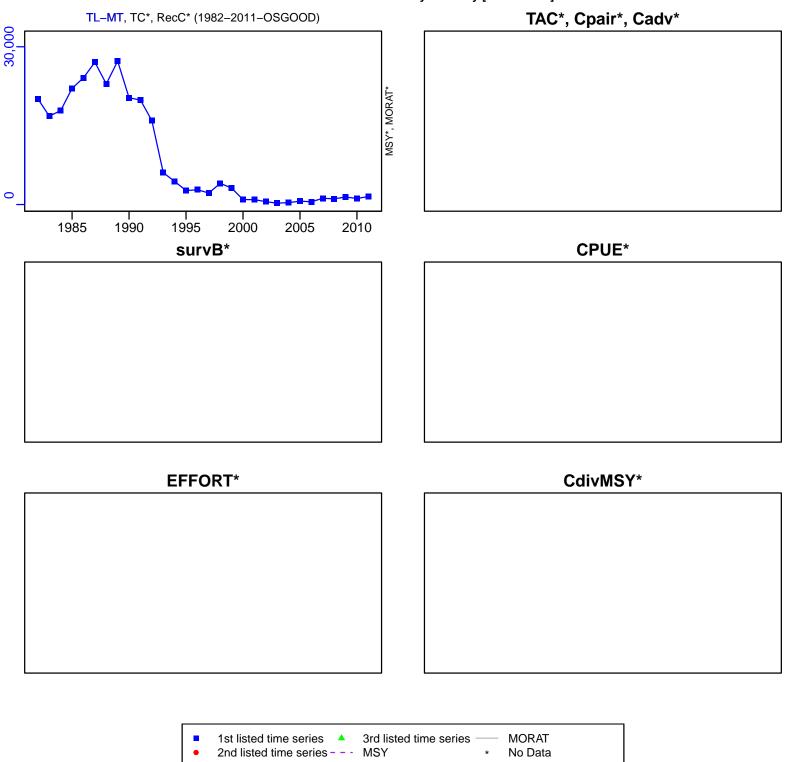
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2011	1430		
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*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data

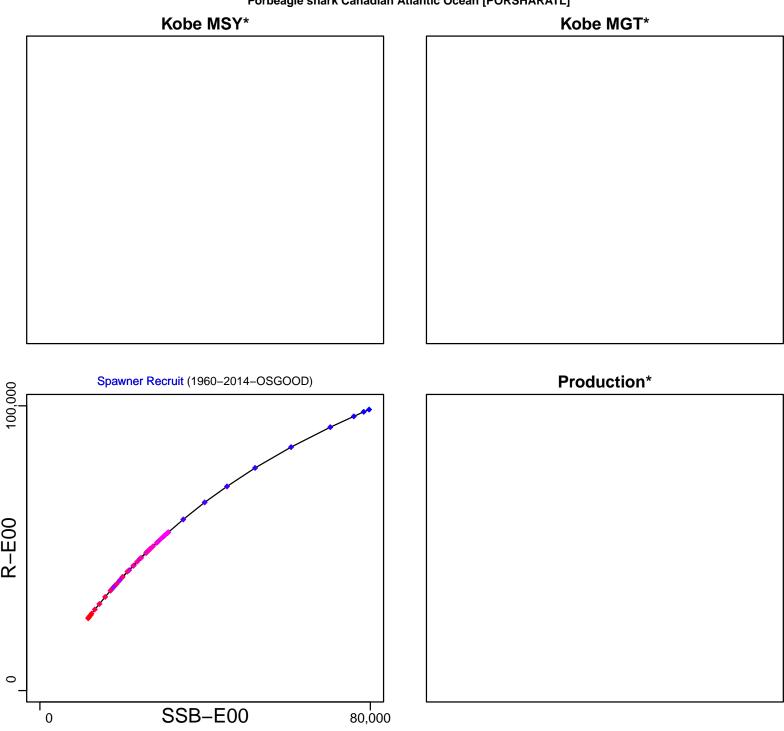


# Porbeagle shark Canadian Atlantic Ocean [PORSHARATL]

Metadata				
Scientific Name	Lamna nasus			
Current Assess ID DFO-PORSHARATL-1960-2014-OSGOOD				
Area Canadian Atlantic Ocean				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor Department of Fisheries and Oceans				
Asmts in RAM	2014			

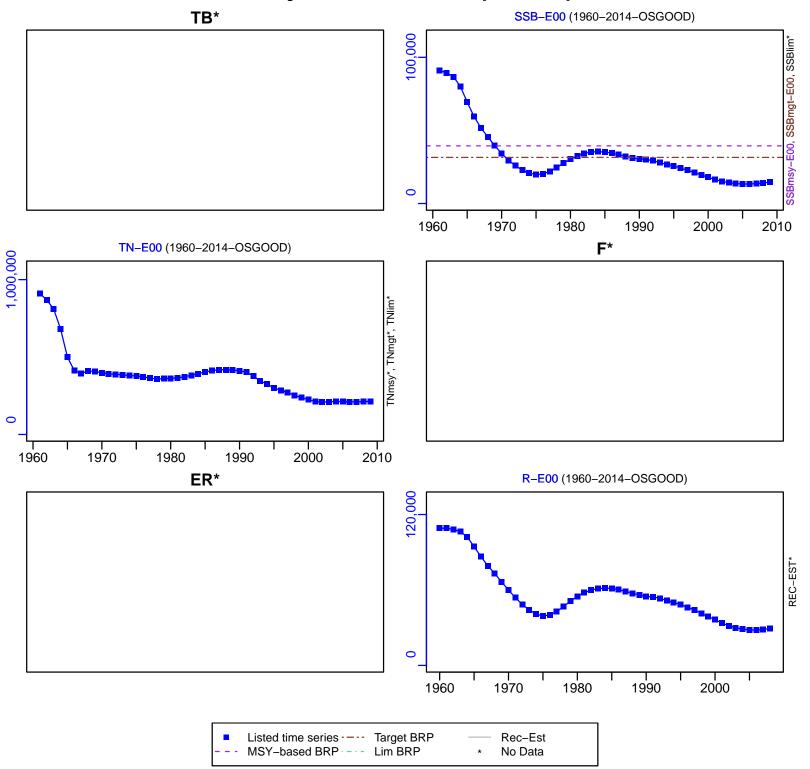
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	SSBmsy-E00	2014	34,573		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	SSBmgt-E00	2014	27,658		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2014	0.2		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-E00	2014	12,900	-	-
TN	TN-E00	2014	199,000	Both	-
R	R-E00	2014	26,500	Both	1
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	81		
TL	TL-MT	2014	9		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-E00/SSBmsy-E00	2014	0.373		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-E00/SSBmgt-E00	2014	0.466		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

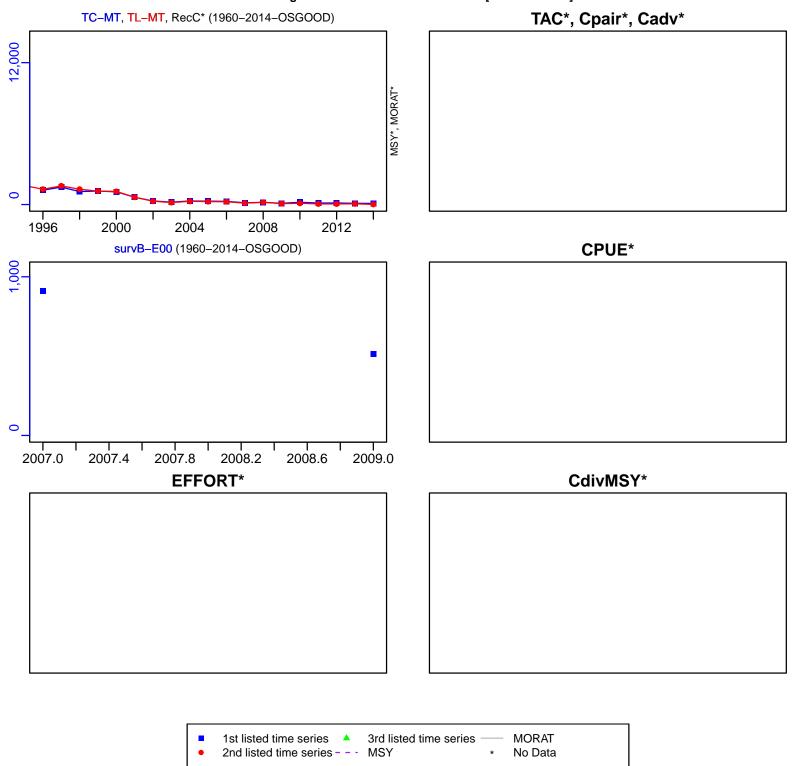


Start Year • End Year \* No Data

### Porbeagle shark Canadian Atlantic Ocean [PORSHARATL]



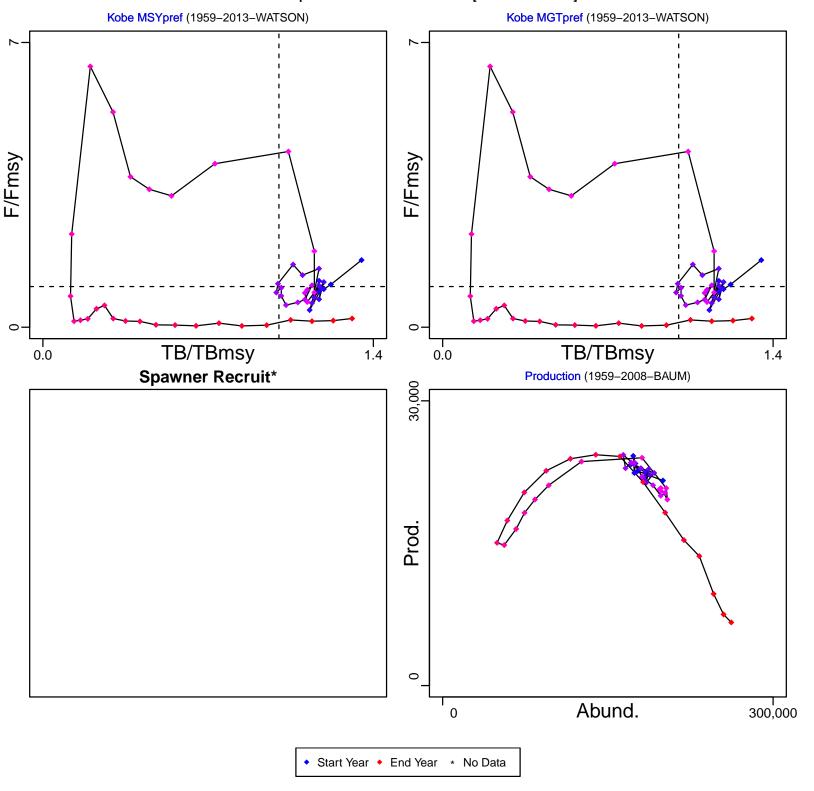
#### Porbeagle shark Canadian Atlantic Ocean [PORSHARATL]

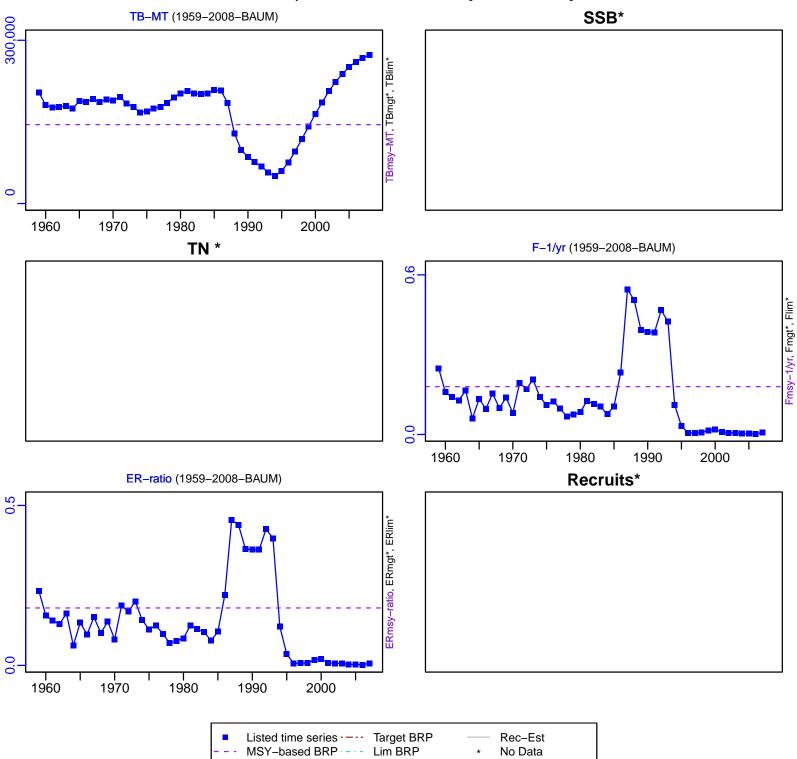


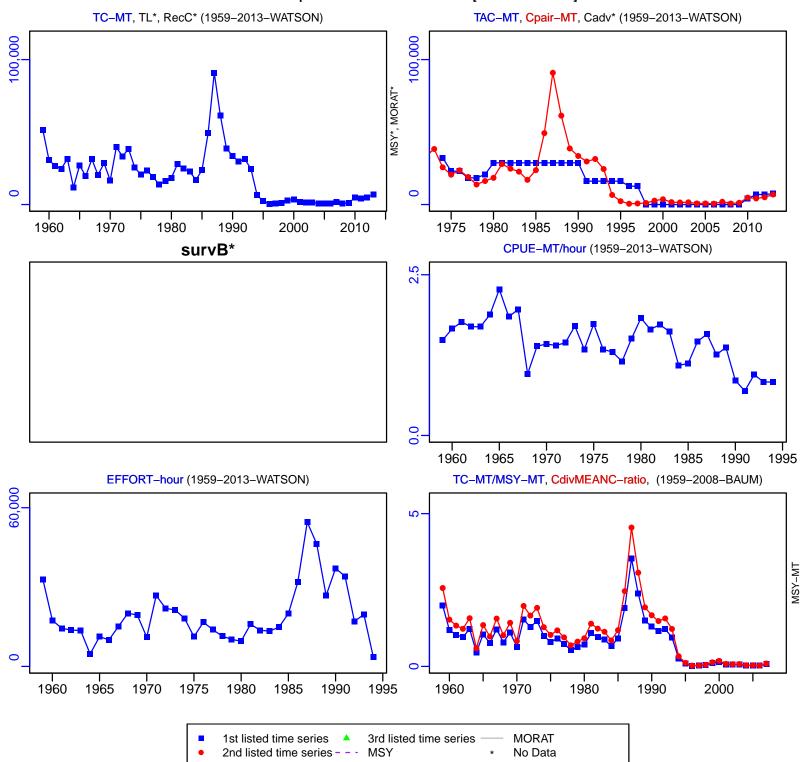
Metadata			
Scientific Name	Sebastes spp		
Current Assess ID NAFO-SC-REDFISHSPP3LN-1959-2013-WATSON			
Area N and SW Grand Banks			
Management Authority	Northwest Atlantic Fisheries Organization		
Assessor	NAFO Scientific Council		
Asmts in RAM	2008, 2013		

Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	TBmsy-MT	2008	141,900		
SSBmsy	-	-	-		
Fmsy	Fmsy-1/yr	2008	0.172		
ERmsy	ERmsy-ratio	2008	0.172		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	MSY-MT	2008	24,440		
M	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2008	267,000	-	ALL AGES
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2008	0.007	Both	-
ER	ER-ratio	2008	0.006	-	-
TC	TC-MT	2013	6000		
TL	-	-	-		
TB/TBmsy	TBdivTBmsy-dimensionless	2013	1.31		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2013	0.214		
ER/ERmsy	ER-ratio/ERmsy-ratio	2008	0.037		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





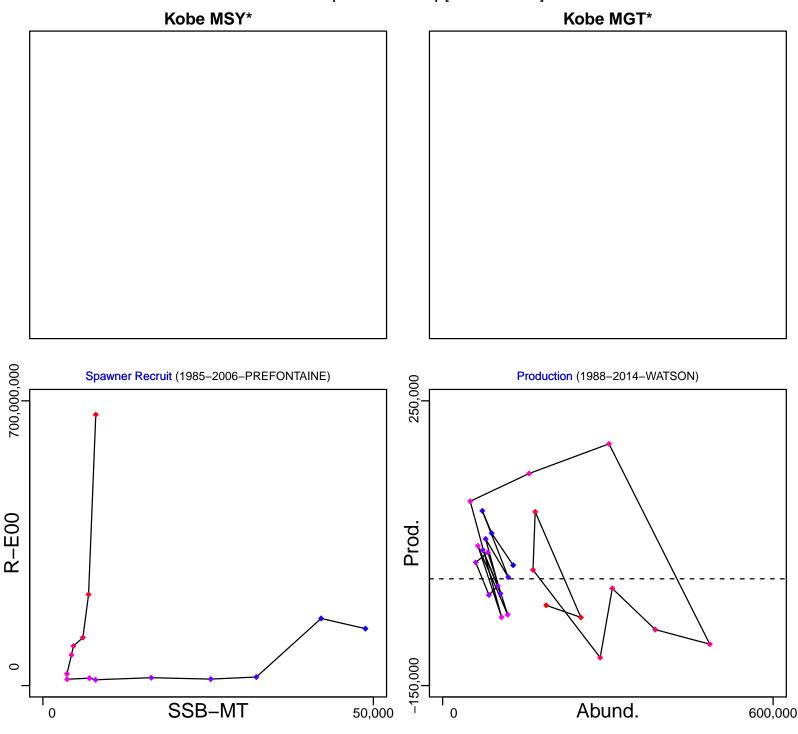


# Redfish species Flemish Cap [REDFISHSPP3M]

Metadata			
Scientific Name	Sebastes spp		
Current Assess ID NAFO-SC-REDFISHSPP3M-1988-2014-WATSC			
Area Flemish Cap			
Management Authority Northwest Atlantic Fisheries Organization			
Assessor	NAFO Scientific Council		
Asmts in RAM	2006, 2014		

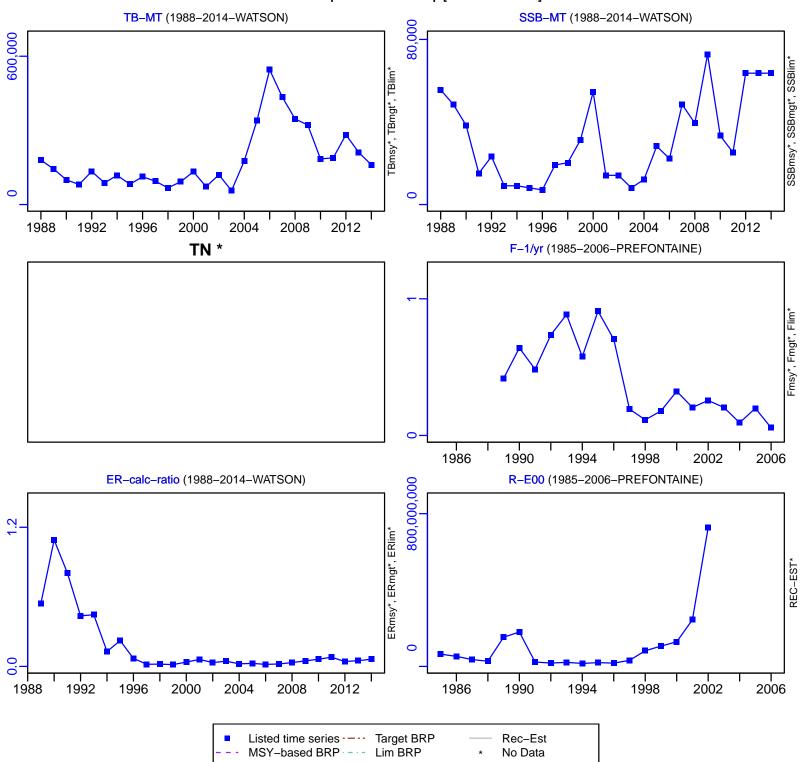
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	M-1/yr	2006	0.1	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2014	143,000	Both	-
SSB	SSB-MT	2014	63,000	Females	13+
TN	-	-	-	-	-
R	R-E00	2006	$6.66 \times 10^{8}$	-	4
F	F-1/yr	2006	0.046	-	6 to 16
ER	ER-calc-ratio	2014	0.052	-	-
TC	TC-MT	2014	7400		
TL	TL-MT	2006	4120		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

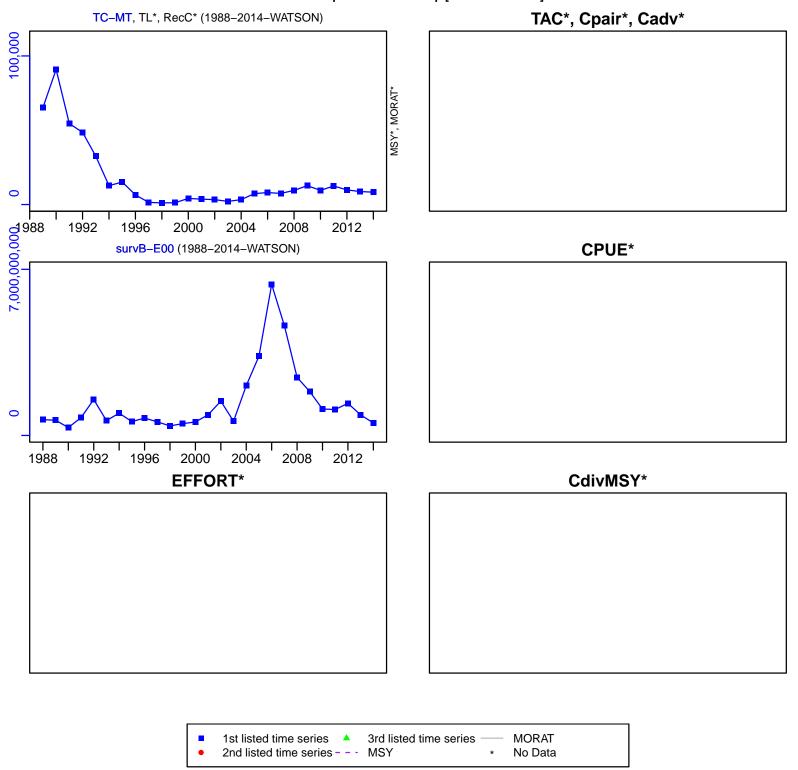


Start Year • End Year • No Data

#### Redfish species Flemish Cap [REDFISHSPP3M]



#### Redfish species Flemish Cap [REDFISHSPP3M]



Metadata				
Scientific Name	Sebastes spp			
Current Assess ID DFO-REDFISHSPPUT1-1960-2017-ASHBROOK				
Area Unit 1				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans			
Asmts in RAM	2017			

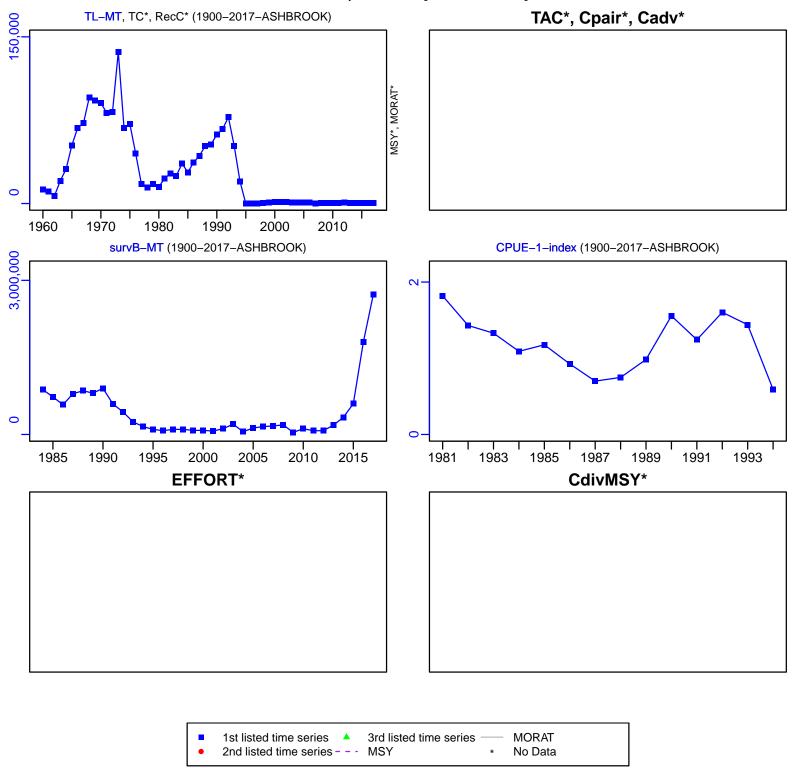
F	Reference Points				
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
M	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	328		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data

TB*	SSB*
TN *	F*
ER*	Recruits*
	I L
Listed time series Ta MSY-based BRP Li	arget BRP — Rec-Est



Metadata		
Scientific Name	Sebastes spp	
Current Assess ID	DFO-REDFISHSPPUT2-1960-2017-ASHBROOK	
Area	Unit 2	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans	
Asmts in RAM	2017	

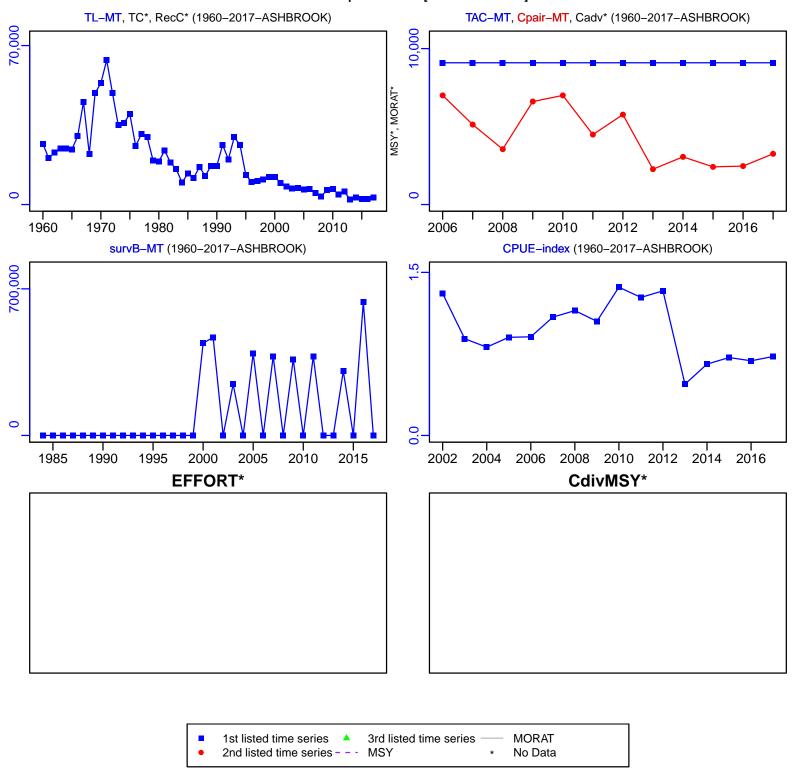
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	3042		
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*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



# Rock crab Southern Gulf of St. Lawrence [ROCKCRABLFA23-26]

Metadata		
Scientific Name	Cancer irroratus	
Current Assess ID	DFO-SG-ROCKCRABLFA23-26-1985-2010-OSGOOD	
Area	Southern Gulf of St. Lawrence	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Southern Gulf Region	
Asmts in RAM	2010	

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	4520		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

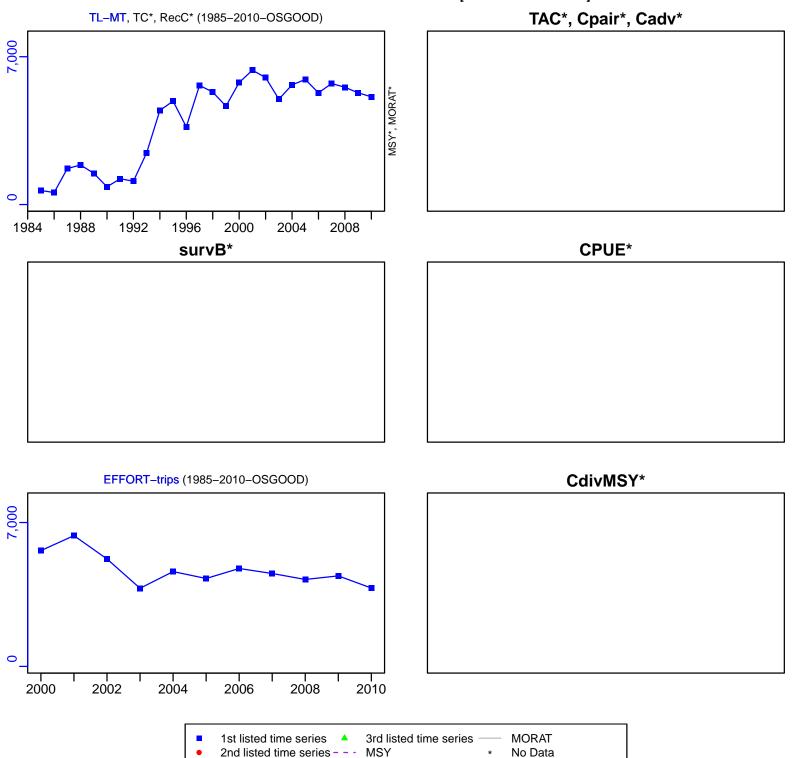
### Rock crab Southern Gulf of St. Lawrence [ROCKCRABLFA23-26]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

Start Year ◆ End Year \* No Data

### Rock crab Southern Gulf of St. Lawrence [ROCKCRABLFA23-26]

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



# Rock crab Quebec Coastal Waters [ROCKCRABQCW]

Metadata				
Scientific Name	Cancer irroratus			
Current Assess ID	DFO-QUE-ROCKCRABQCW-1994-2016-ASHBROOK			
Area	Quebec Coastal Waters			
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Quebec Region			
Asmts in RAM	2016, 2012			

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

Time Series								
Туре	ID	Asmt Year	Curr Value	Sex	Age			
ТВ	-	-	-	-	-			
SSB	-	-	-	-	-			
TN	-	-	-	-	-			
R	-	-	-	-	-			
F	-	-	-	-	-			
ER	-	-	-	-	-			
TC	-	-	-					
TL	TL-MT	2016	923					
TB/TBmsy	-	-	-					
SSB/SSBmsy	-	-	-					
F/Fmsy	-	-	-					
ER/ERmsy	-	-	-					
TB/TBmgt	-	-	-					
SSB/SSBmgt	-	-	-					
F/Fmgt	-	-	-					
ER/ERmgt	-	-	-					

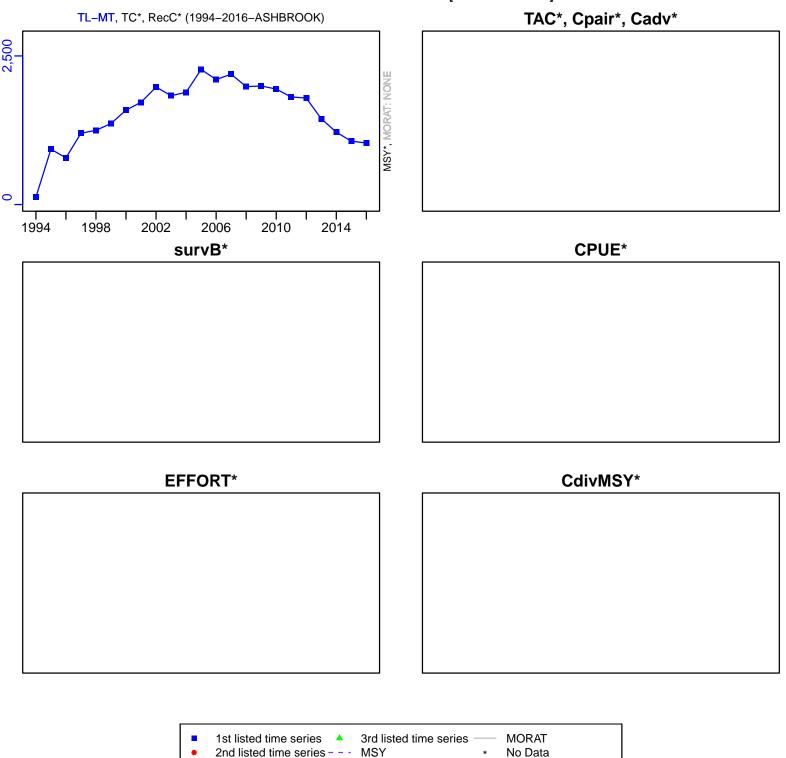
### Rock crab Quebec Coastal Waters [ROCKCRABQCW]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Opawner Necruit	
Opawner Recruit	Troduction
Opawner Recruit	
Opawner rectuit	
Opawner recordit	

## Rock crab Quebec Coastal Waters [ROCKCRABQCW]

TB*	SSB*
TN *	F*
ED*	Doowito*
ER*	Recruits*
	J
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data

### Rock crab Quebec Coastal Waters [ROCKCRABQCW]



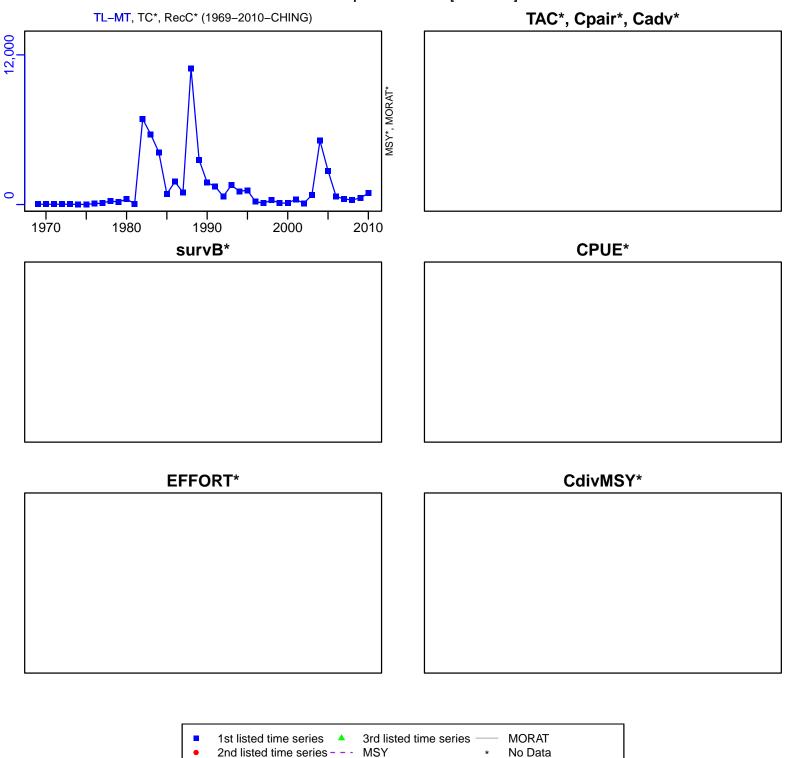
Metadata		
Scientific Name	Placopecten magellanicus	
Current Assess ID	DFO-NFLD-SCALL3Ps-1969-2010-CHING	
Area	St. Pierre Bank	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Newfoundland Region	
Asmts in RAM	2010	

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	813		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



# Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

Metadata		
Scientific Name	Placopecten magellanicus	
Current Assess ID	DFO-SG-SCALL4T-1968-2016-ASHBROOK	
Area	Southern Gulf of St. Lawrence	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Southern Gulf Region	
Asmts in RAM	2014, 2010, 2016	

Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2016	0.225
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

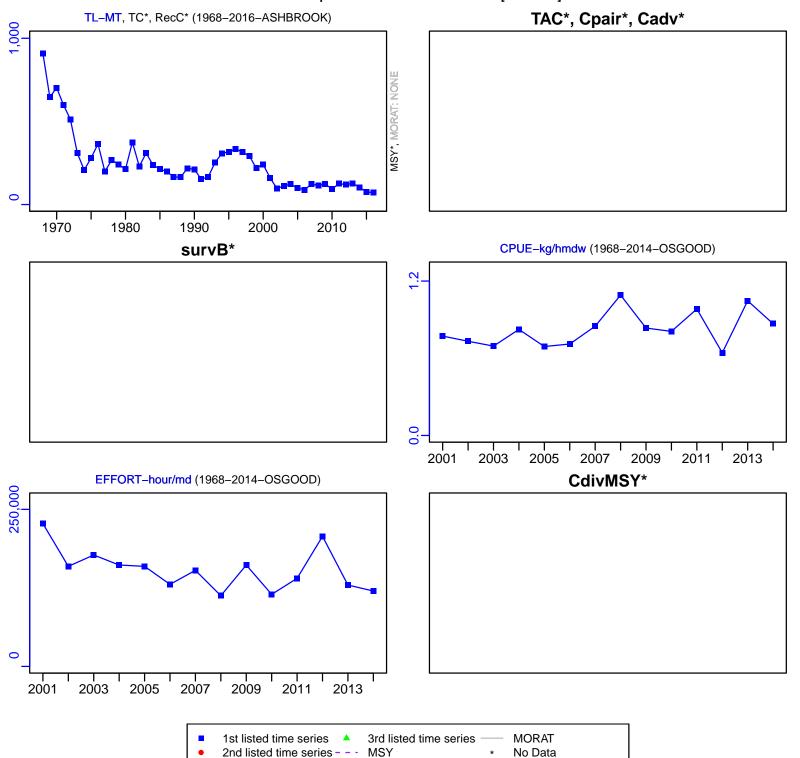
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	72		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

### Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

### Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data

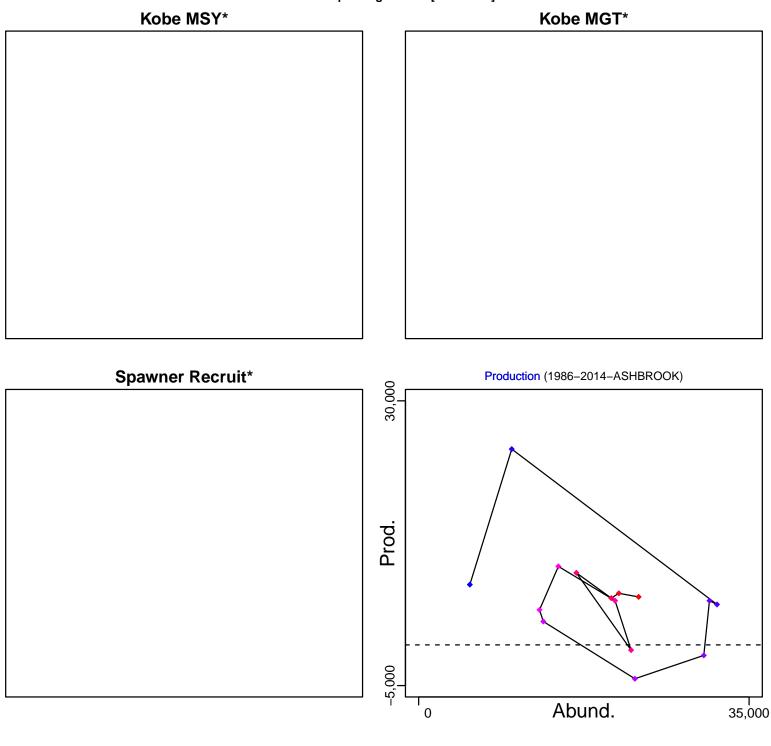


# Sea scallop Georges Bank [SCALLGB]

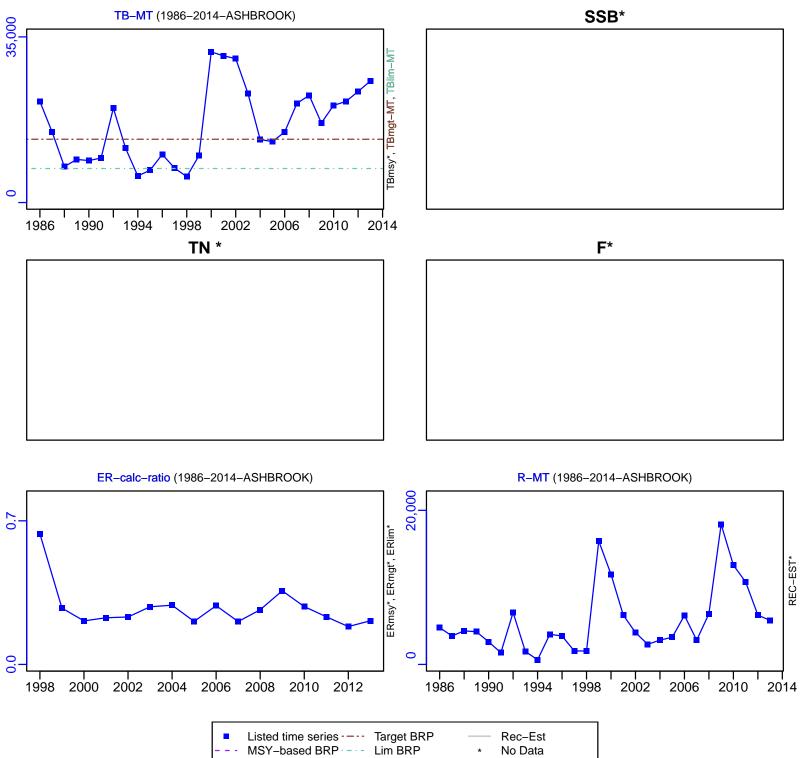
Metadata			
Scientific Name	Placopecten magellanicus		
Current Assess ID	DFO-SCALLGB-1986-2014-ASHBROOK		
Area Georges Bank			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans		
Asmts in RAM	2012, 2007, 2014		

Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	TBmgt-MT	2014	13,284		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2014	0.159		
TBlim	TBlim-MT	2014	7137		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

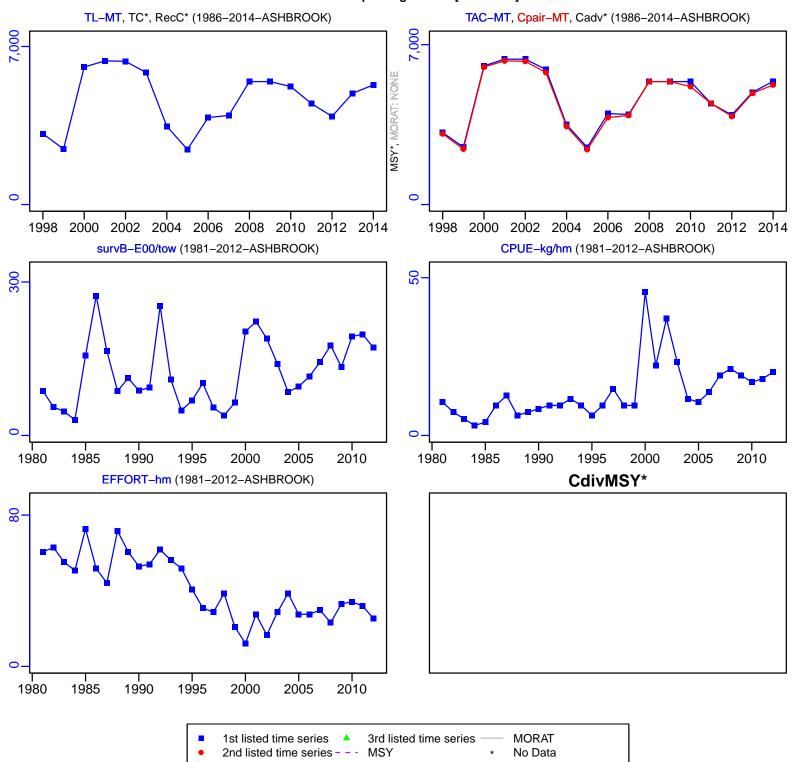
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2014	25,500	Both	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-MT	2014	5270	Both	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.183	-	-
TC	-	-	-		
TL	TL-MT	2014	5020		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	TB-MT/TBmgt-MT	2014	1.92		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



#### Sea scallop Georges Bank [SCALLGB]



#### Sea scallop Georges Bank [SCALLGB]

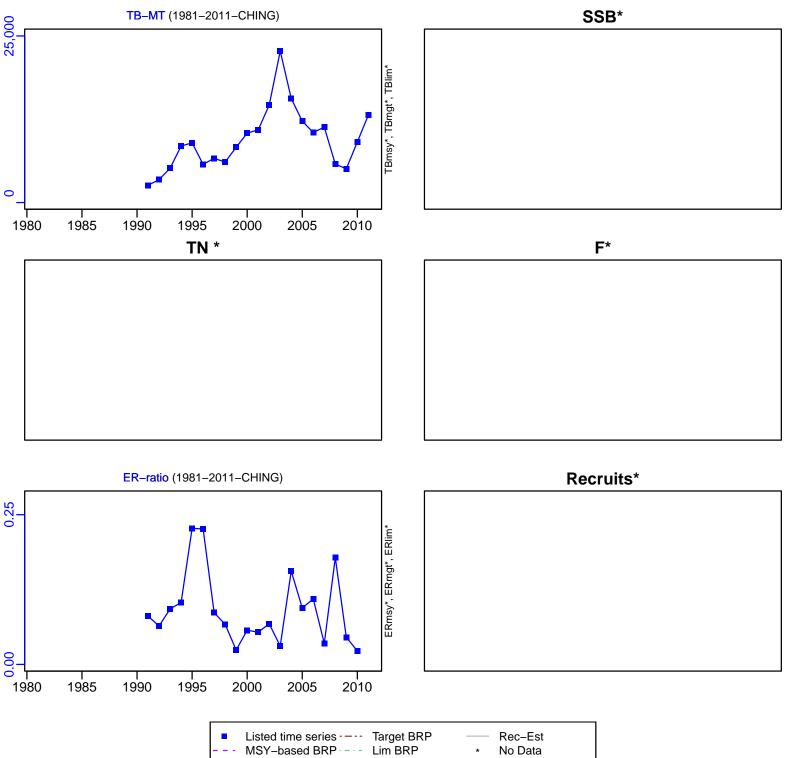


Metadata				
Scientific Name	Placopecten magellanicus			
Current Assess ID	DFO-MAR-SCALLNBB-1981-2011-CHING			
Area	North Brown Bank			
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Maritimes Region			
Asmts in RAM	2011			

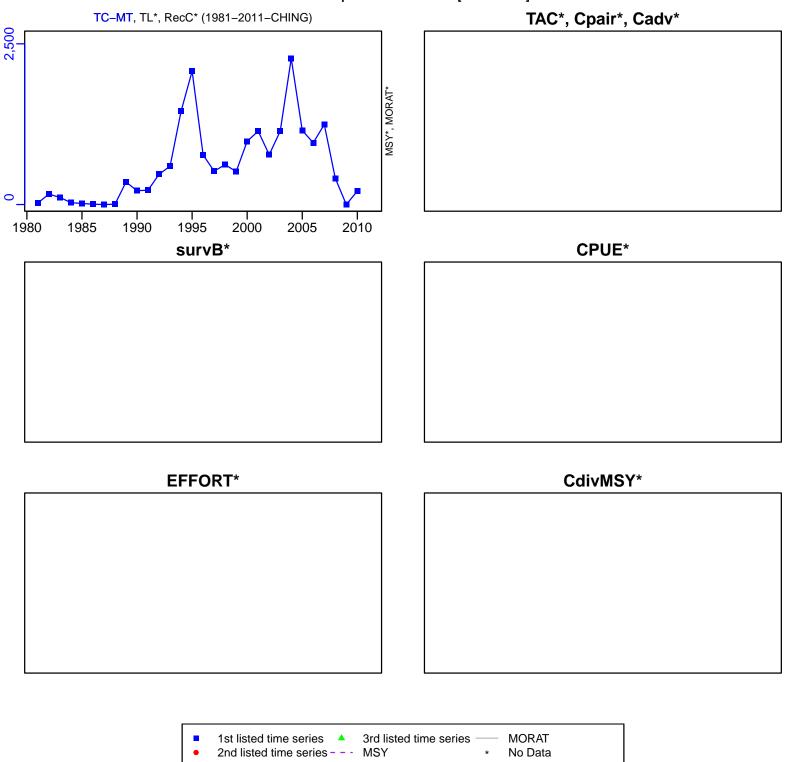
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2011	13,100	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2011	0.02	-	-
TC	TC-MT	2011	201		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*



No Data



# Sea scallop Scallop Fishing Areas 16-20 [SCALLSFA16-20]

Metadata				
Scientific Name	Placopecten magellanicus			
Current Assess ID	DFO-QUE-SCALLSFA16-20-1965-2015-ASHBROOK			
Area Scallop Fishing Areas 16-20				
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Quebec Region			
Asmts in RAM	2012, 2015			

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

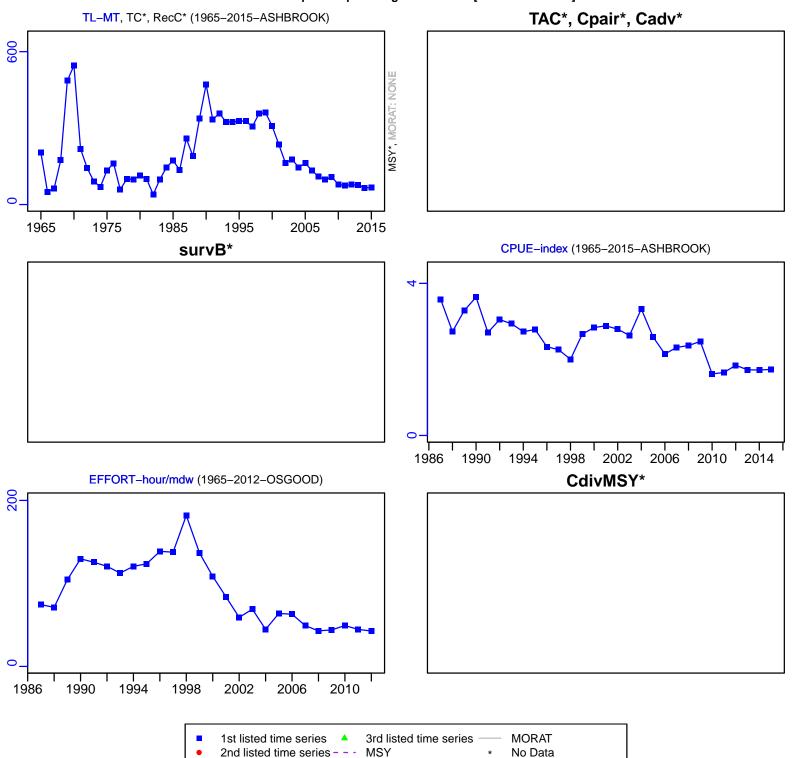
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	61		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

## Sea scallop Scallop Fishing Areas 16–20 [SCALLSFA16–20]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

## Sea scallop Scallop Fishing Areas 16–20 [SCALLSFA16–20]

TB*	SSB*
TN *	F*
I N	<b>F</b> *
ER*	Recruits*
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



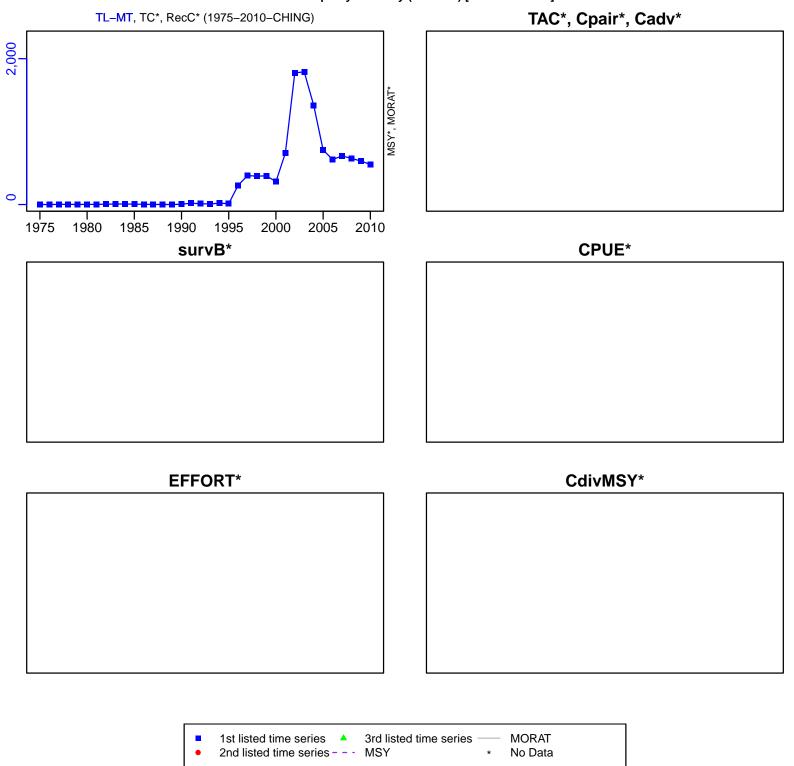
Metadata			
Scientific Name	Placopecten magellanicus		
Current Assess ID	DFO-MAR-SCALLSPA1-6-1975-2010-CHING		
Area	Bay of Fundy (SPA 1-6)		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2010		

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	481		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ER*	Recruits*
■ Listed time series Ta MSY-based BRP Li	arget BRP — Rec-Est
MSY-based BRP Li	m BRP * No Data

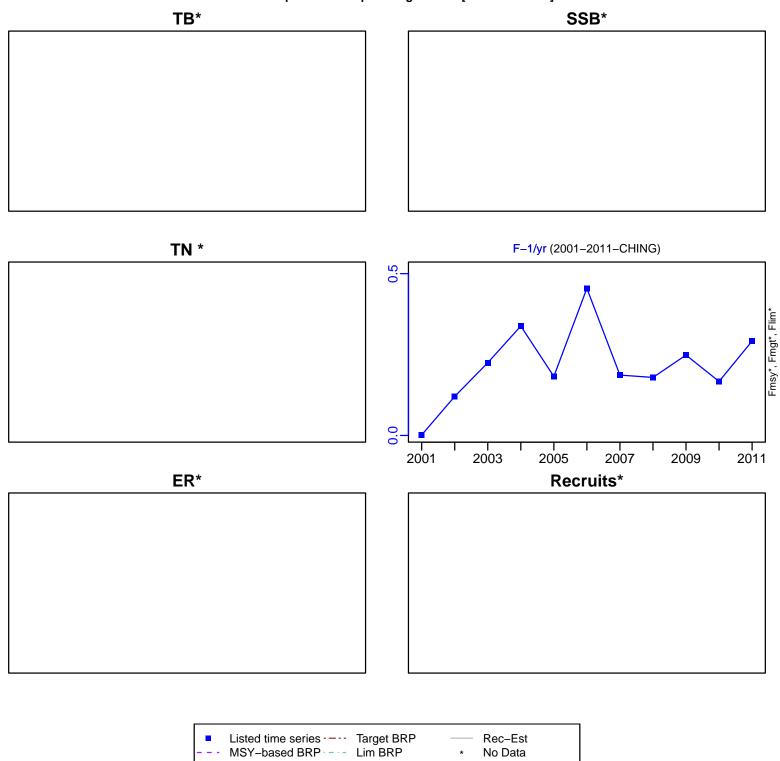


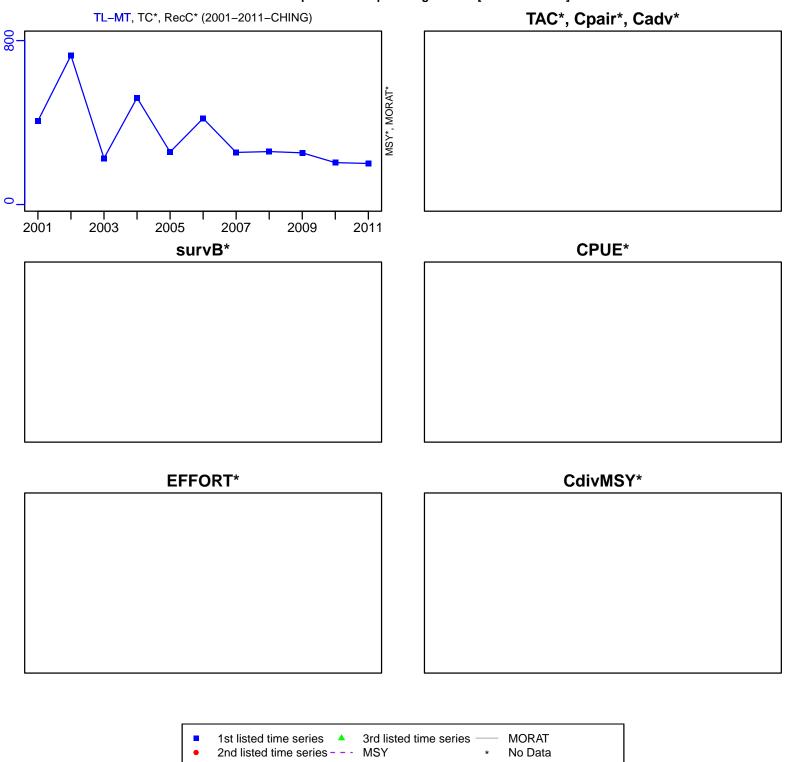
Metadata			
Scientific Name	Placopecten magellanicus		
Current Assess ID	DFO-MAR-SCALLWSFA29-2001-2011-CHING		
Area	West Scallop Fishing Area 29		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2011		

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2011	0.283	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2011	197		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*





# Spiny dogfish Scotian Shelf, Bay of Fundy and Georges Bank [SDOG4VWX5]

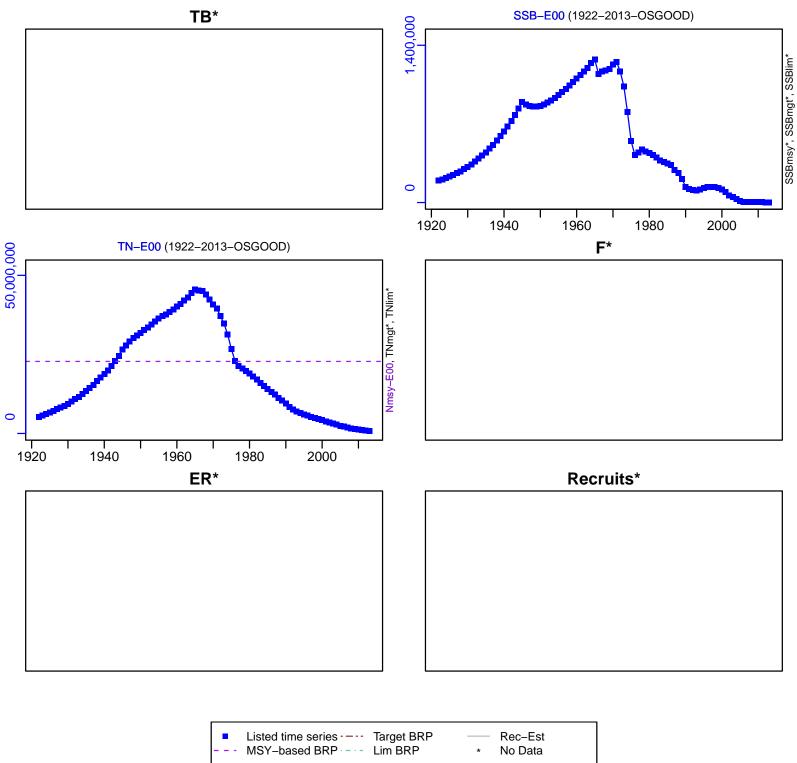
Metadata			
Scientific Name	Squalus acanthias		
Current Assess ID	DFO-MAR-SDOG4VWX5-1922-2013-OSGOOD		
Area	Scotian Shelf, Bay of Fundy and Georges Bank		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2013		

Reference Points						
Туре	ID	Asmt Year	Value			
TBmsy	-	-	-			
SSBmsy	-	-	-			
Fmsy	-	-	-			
ERmsy	-	-	-			
TBmgt	-	-	-			
SSBmgt	-	-	-			
Fmgt	-	-	-			
ERmgt	-	-	-			
TB0	-	-	-			
SSB0	-	-	-			
MSY	MSY-MT	2013	742			
M	M-1/yr	2013	0.1			
TBlim	-	-	-			
SSBlim	-	-	-			
Flim	-	-	-			
ERlim	-	-	-			

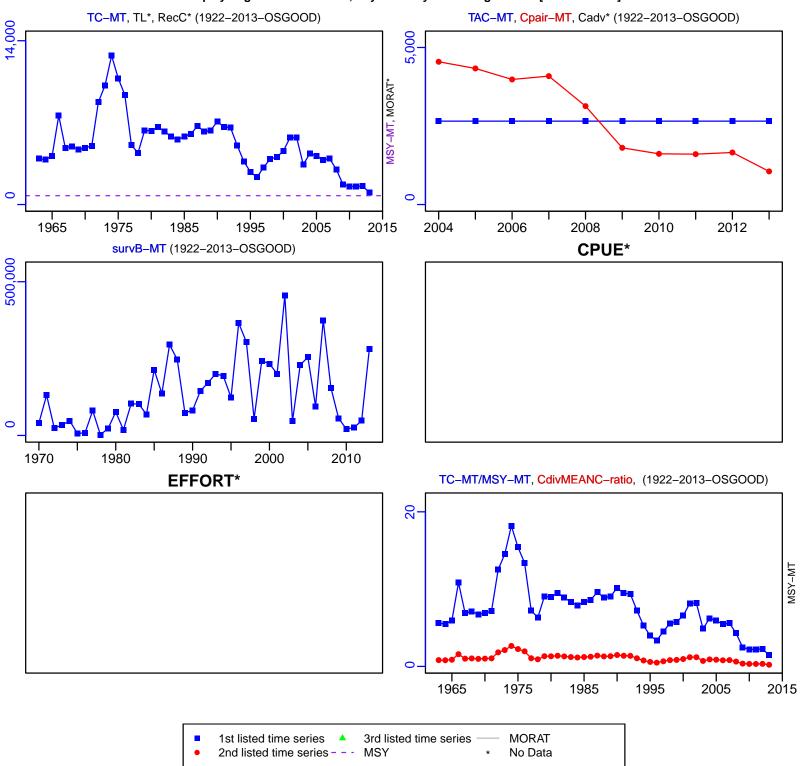
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-E00	2013	1790	-	-
TN	TN-E00	2013	792,000	Both	0+
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2013	993		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spiny dogfish Scotian Shelf, Bay of Fundy and Georges Bank [SDOG4VWX5]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
Spawner Recruit	rioduction
Spawner Recruit	Froduction
Spawner Recruit	Froduction
Spawner Recruit	Production
Spawner Recruit	Production
Spawner Recruit	Froduction
Spawner Recruit	



#### Spiny dogfish Scotian Shelf, Bay of Fundy and Georges Bank [SDOG4VWX5]



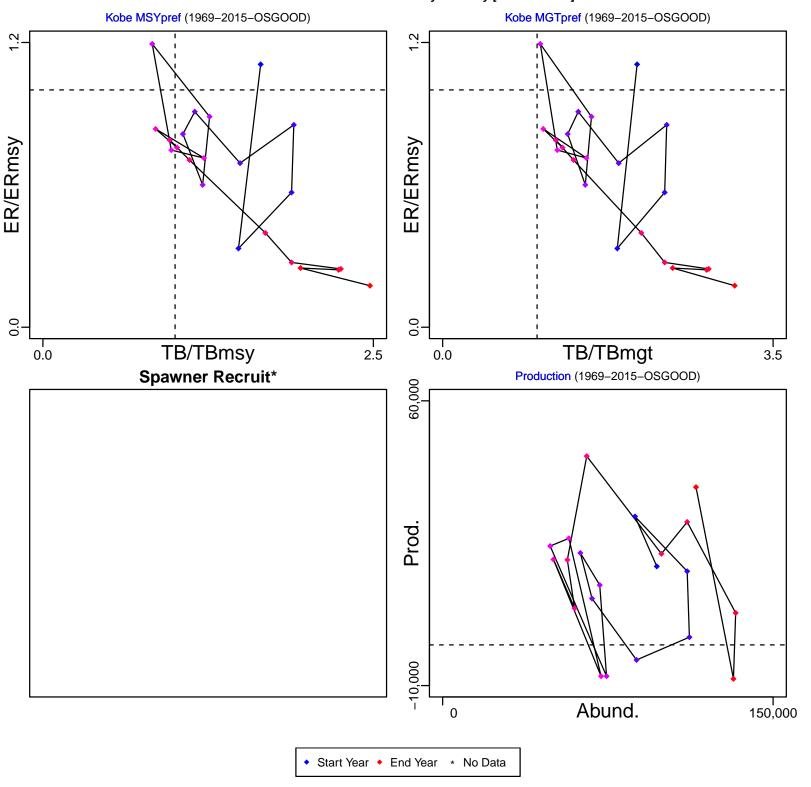
# Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]

Metadata				
Scientific Name	Merluccius bilinearis			
Current Assess ID	DFO-MAR-SHAKE4VWX-1969-2015-OSGOOD			
Area	Scotian Shelf and Bay of Fundy			
Management Authority	Department of Fisheries and Oceans, Canada national management			
Assessor	Department of Fisheries and Oceans - Maritimes Region			
Asmts in RAM	2015			

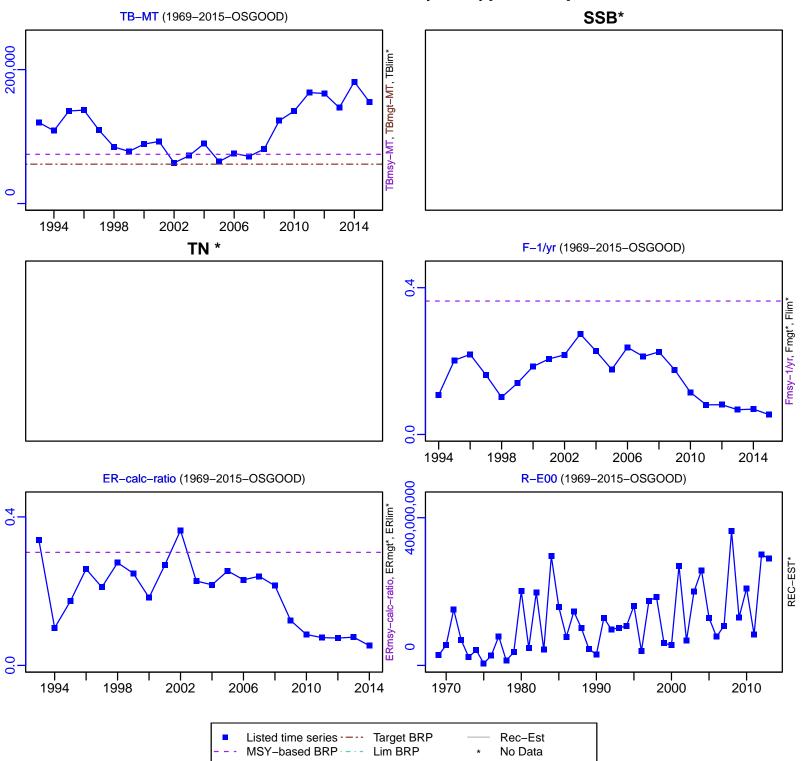
Reference Points					
Туре	ID Asmt Year		Value		
TBmsy	TBmsy-MT	2015	59,000		
SSBmsy	-	-	-		
Fmsy	Fmsy-1/yr	2015	0.32		
ERmsy	ERmsy-calc-ratio	2015	0.271		
TBmgt	TBmgt-MT	2015	47,200		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	MSY-MT	2015	16,000		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2015	122,000	Both	0+	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	R-E00	2015	$2.56 \times 10^{8}$	Both	-	
F	F-1/yr	2015	0.048	-	-	
ER	ER-calc-ratio	2015	0.047	-	-	
TC	-	-	-			
TL	TL-MT	2015	6930			
TB/TBmsy	TB-MT/TBmsy-MT	2015	2.068			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.149			
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2015	0.175			
TB/TBmgt	TB-MT/TBmgt-MT	2015	2.585			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

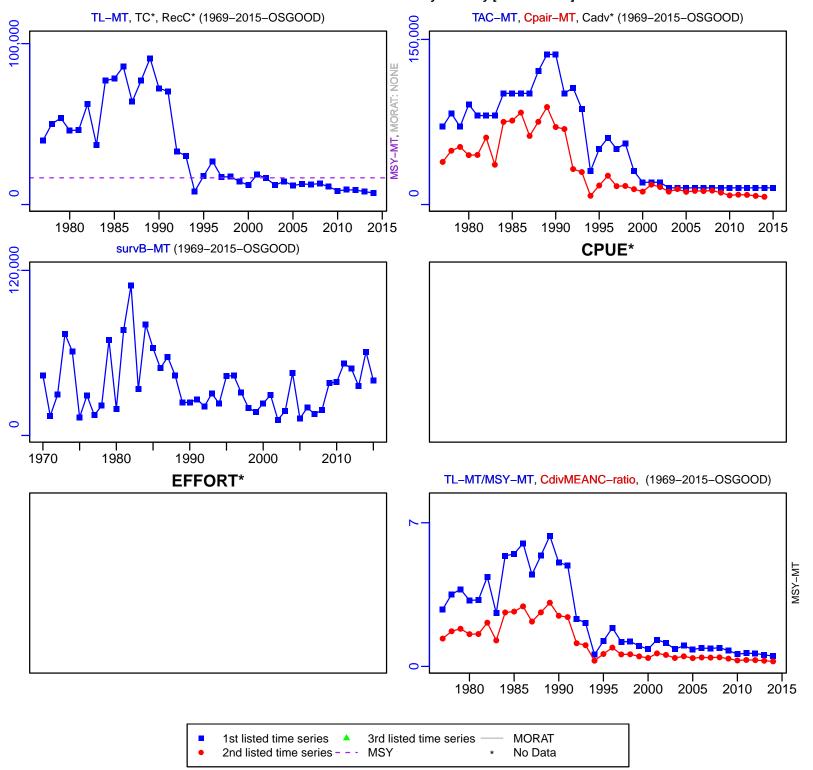
### Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]



### Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]



### Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]



Metadata			
Scientific Name	Malacoraja senta		
Current Assess ID DFO-NFLD-SMOOTHSKA2J3K-1981-2012-OSGOOD			
Area NAFO Division 2J3K			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor Department of Fisheries and Oceans - Newfoundland Region			
Asmts in RAM	2012		

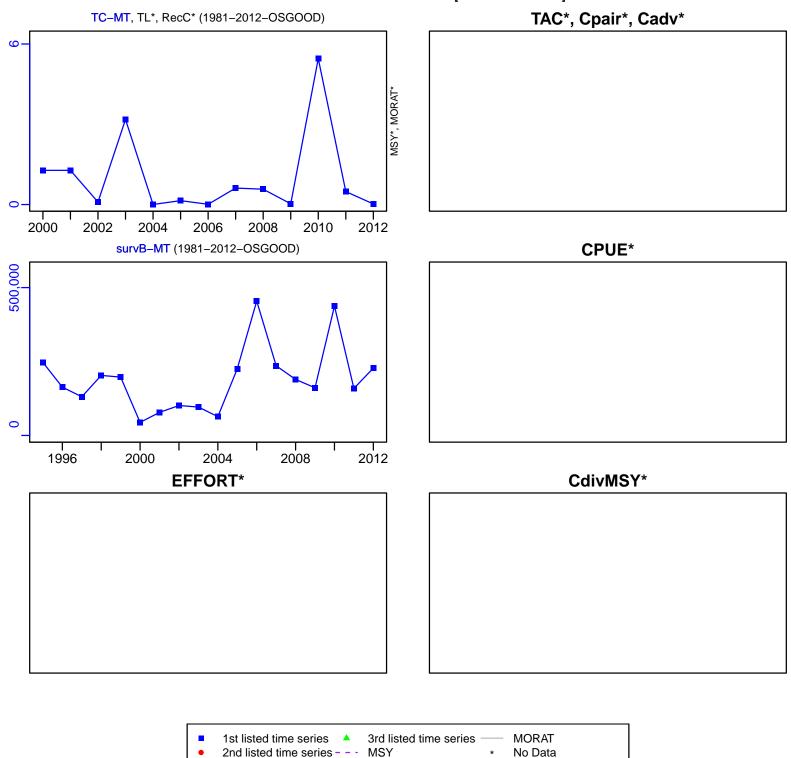
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2012	0.021		
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*
Th	
TN *	<b>F</b> *
ER*	Recruits*
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



# Smooth skate Southern Gulf of St. Lawrence [SMOOTHSKA4T]

Metadata			
Scientific Name Malacoraja senta			
Current Assess ID DFO-NFLD-SMOOTHSKA4T-1971-2010-OSGOOD			
Area Southern Gulf of St. Lawrence			
Management Authority Department of Fisheries and Oceans, Canada national management			
Assessor Department of Fisheries and Oceans - Newfoundland Region			
Asmts in RAM	2010		

Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	MSY-MT	2010	120		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2010	24		
TL	TL-MT	2010	0.56		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

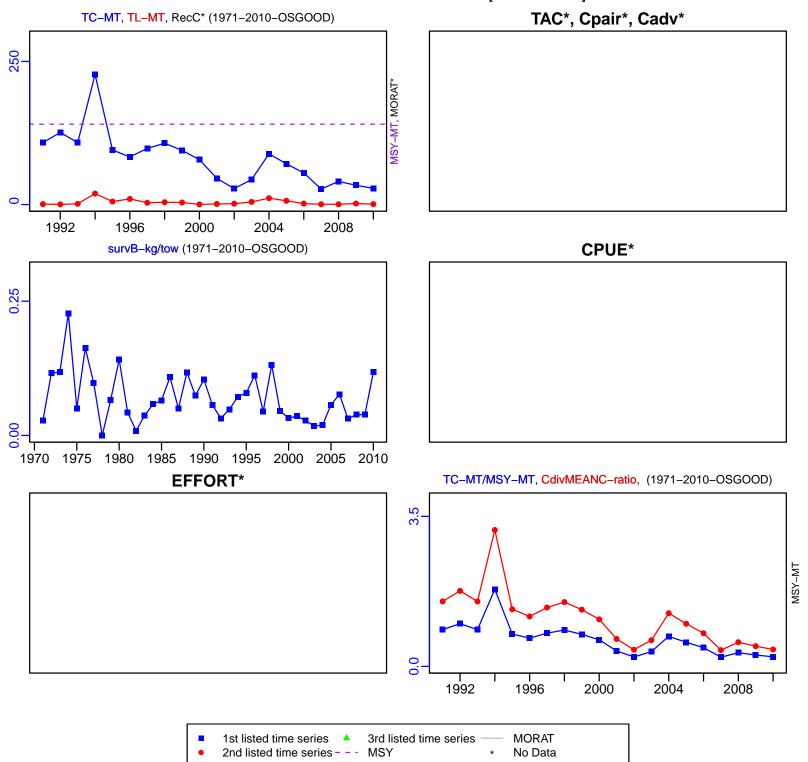
### Smooth skate Southern Gulf of St. Lawrence [SMOOTHSKA4T]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

Start Year ◆ End Year \* No Data

## Smooth skate Southern Gulf of St. Lawrence [SMOOTHSKA4T]

TB*	SSB*
TN *	F*
ER*	Recruits*
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



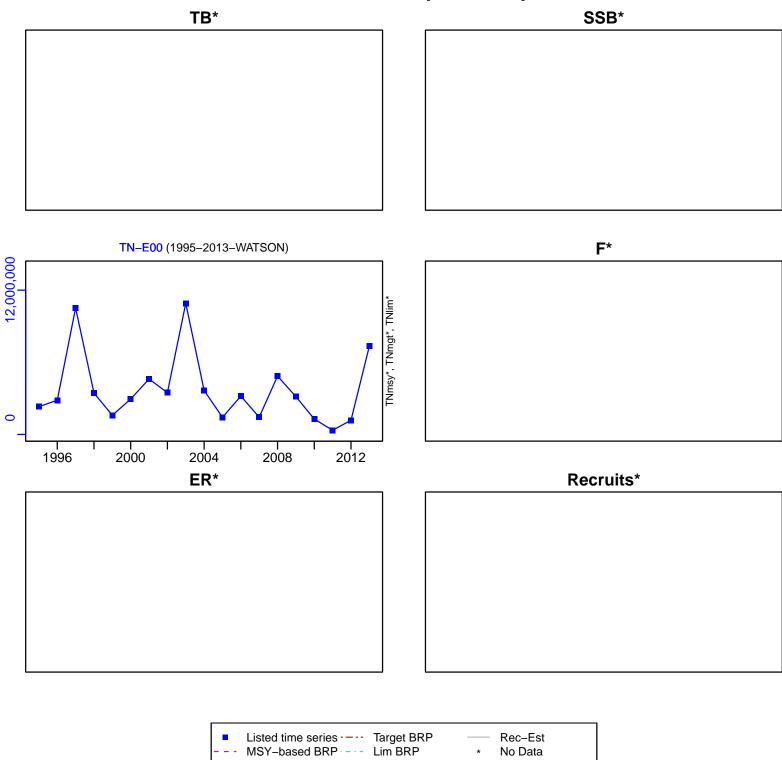
Metadata			
Scientific Name	Chionoecetes opilio		
Current Assess ID DFO-NFLD-SNOWCRAB2HJ-1985-2018-ASHBROOK			
Area Division 2HJ			
Management Authority   Department of Fisheries and Oceans, Canada national managem			
Assessor Department of Fisheries and Oceans - Newfoundland Region			
Asmts in RAM	2018, 2013		

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

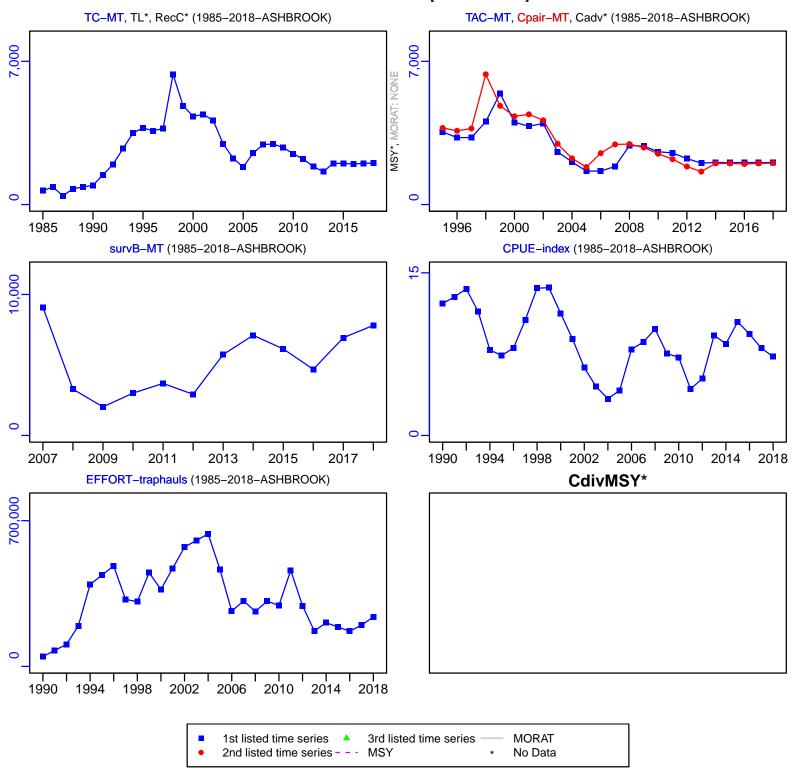
Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	TN-E00	2013	6,350,000	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	TC-MT	2018	1738			
TL	TL-MT	2013	1380			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data



No Data

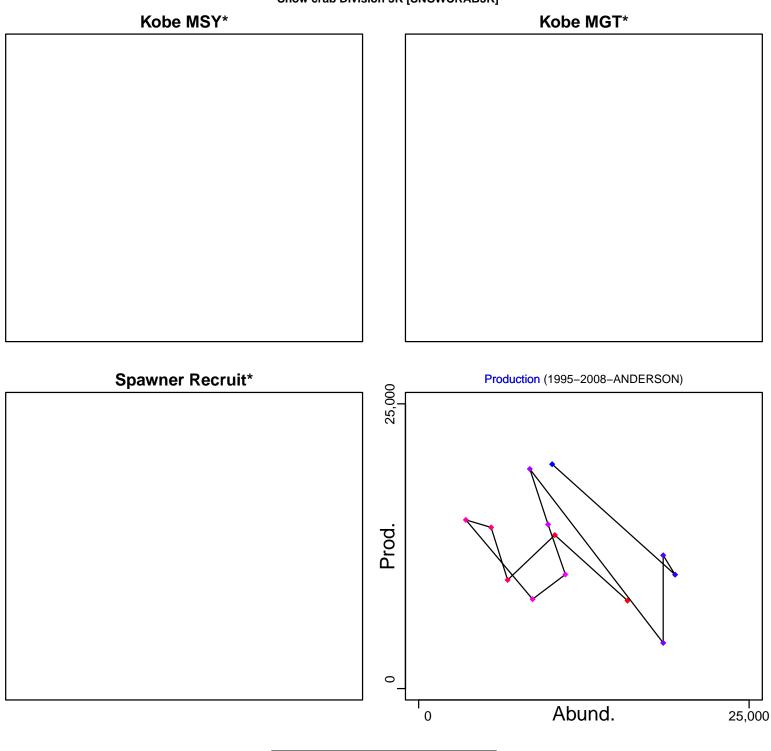


# Snow crab Division 3K [SNOWCRAB3K]

Metadata				
Scientific Name	Chionoecetes opilio			
Current Assess ID	DFO-NFLD-SNOWCRAB3K-1979-2018-ASHBROOK			
Area Division 3K				
Management Authority Department of Fisheries and Oceans, Canada national management				
Assessor Department of Fisheries and Oceans - Newfoundland Region				
Asmts in RAM	2018, 2008, 2013			

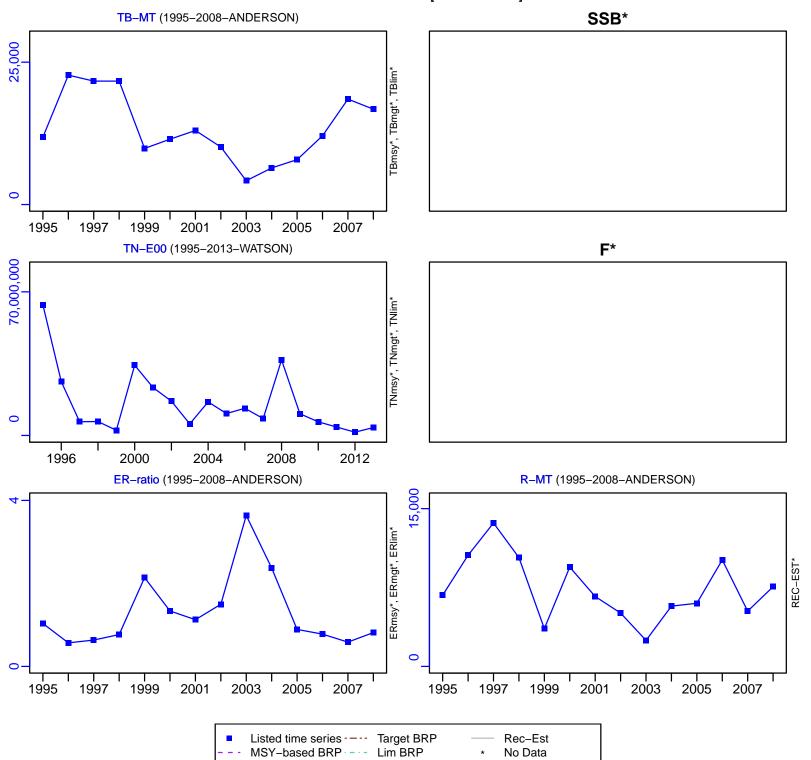
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2008	14,300	-	-	
SSB	-	-	-	-	-	
TN	TN-E00	2013	3,310,000	-	-	
R	R-MT	2008	7170	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2008	0.811	-	-	
TC	TC-MT	2018	5847		1	
TL	TL-MT	2013	8520			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	•	-	-			
SSB/SSBmgt	•	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

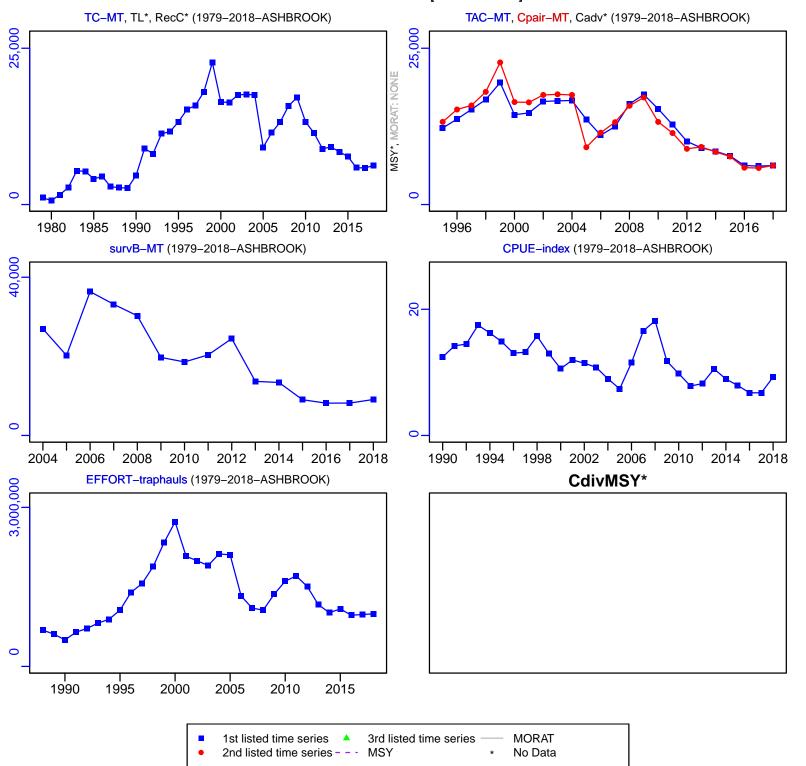


Start Year ◆ End Year \* No Data

### Snow crab Division 3K [SNOWCRAB3K]



#### **Snow crab Division 3K [SNOWCRAB3K]**



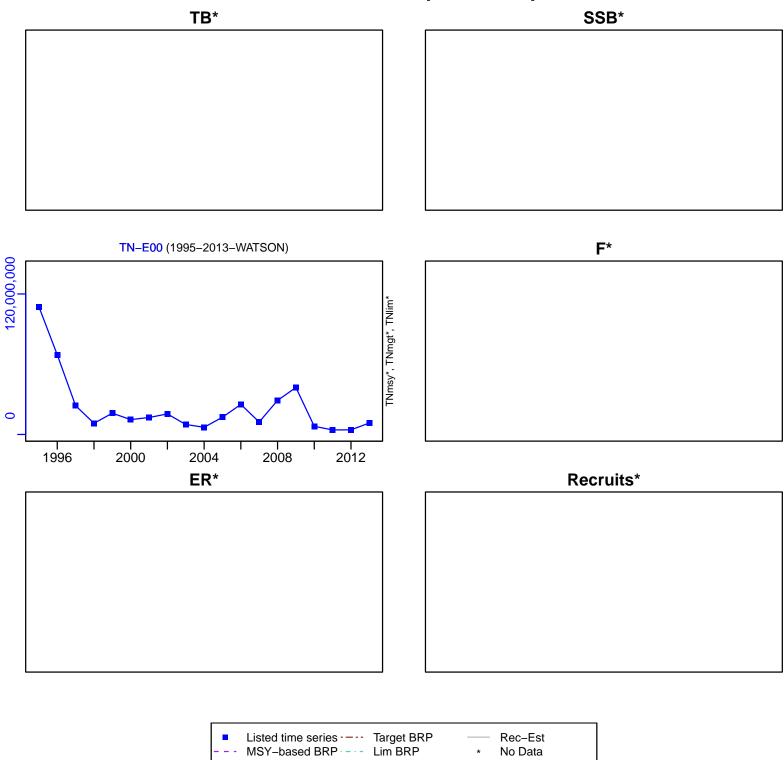
Metadata				
Scientific Name	Chionoecetes opilio			
Current Assess ID DFO-NFLD-SNOWCRAB3LNO-1979-2018-ASHBROOK				
Area Division 3LNO				
Management Authority   Department of Fisheries and Oceans, Canada national management				
Assessor Department of Fisheries and Oceans - Newfoundland Region				
Asmts in RAM	2018, 2013			

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

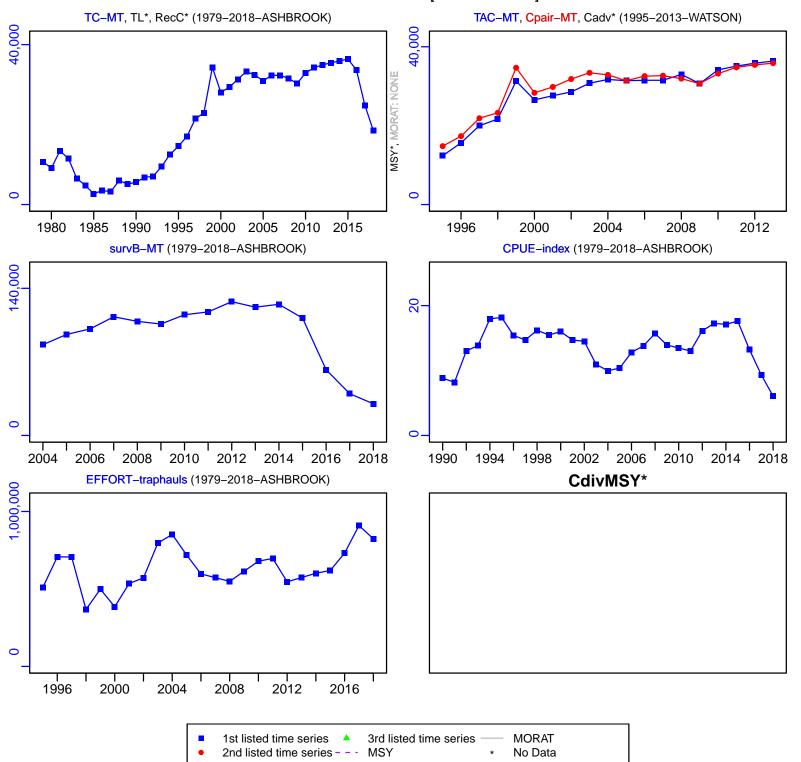
Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	TN-E00	2013	8,270,000	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	1	-	-	-	-	
TC	TC-MT	2018	17,729			
TL	TL-MT	2013	33,900			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	1	-	-			
SSB/SSBmgt	1	-	-			
F/Fmgt	1	-	-			
ER/ERmgt	-	-	-			

Kobe MGT*
Production*

◆ Start Year ◆ End Year \* No Data



No Data



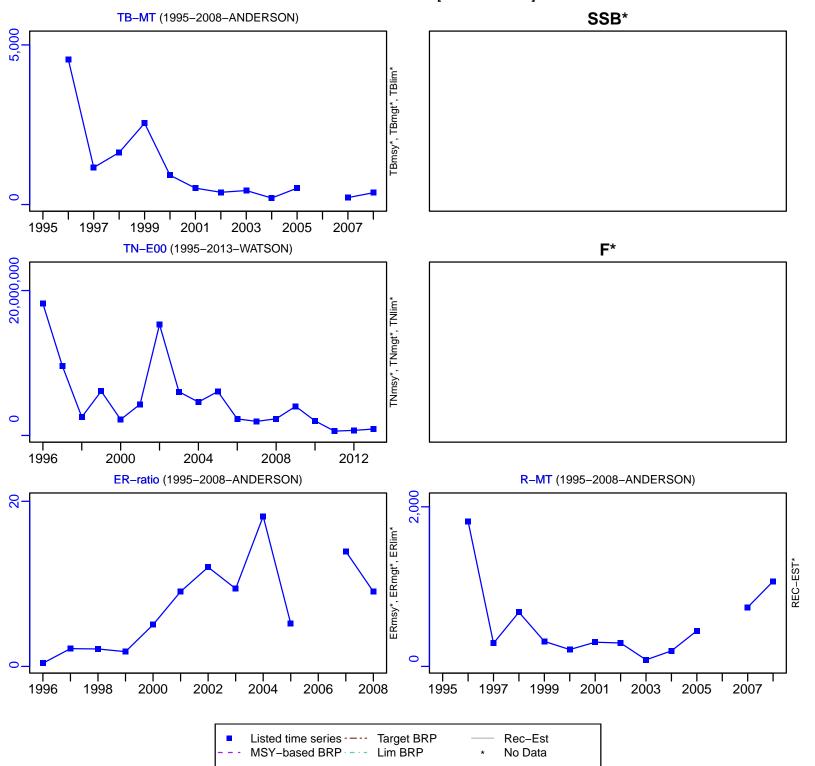
Metadata				
Scientific Name	Chionoecetes opilio			
Current Assess ID DFO-NFLD-SNOWCRAB3Ps-1985-2018-ASHBROOK				
Area St. Pierre Bank				
Management Authority   Department of Fisheries and Oceans, Canada national management				
Assessor Department of Fisheries and Oceans - Newfoundland Region				
Asmts in RAM	2018, 2008, 2013			

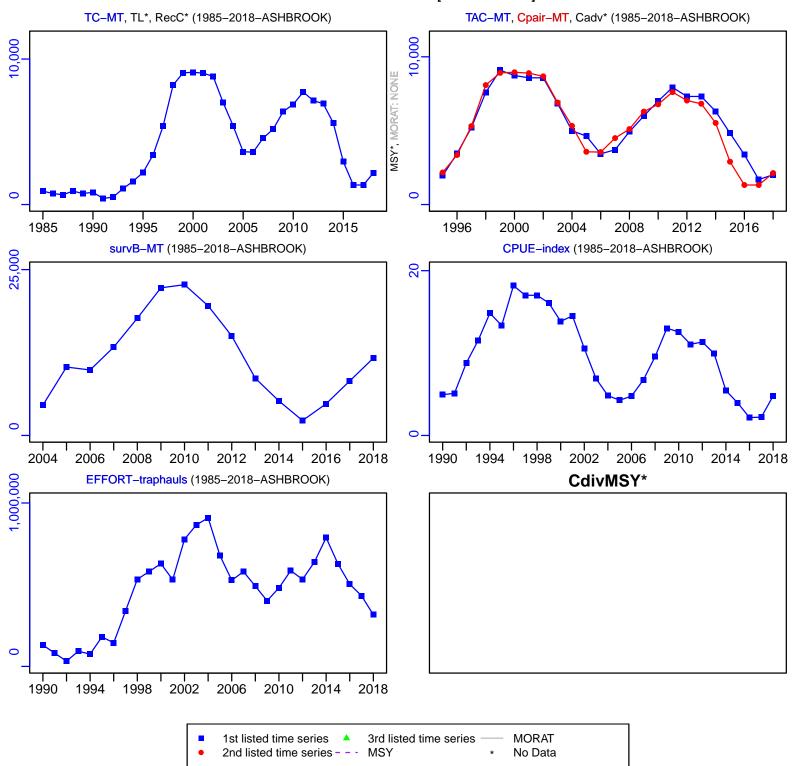
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series						
Туре	ID	Asmt Year	Curr Value	Sex	Age	
ТВ	TB-MT	2008	354	-	-	
SSB	-	-	-	-	-	
TN	TN-E00	2013	768,000	-	-	
R	R-MT	2008	1020	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2008	8.97	-	-	
TC	TC-MT	2018	1886			
TL	TL-MT	2013	6050			
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





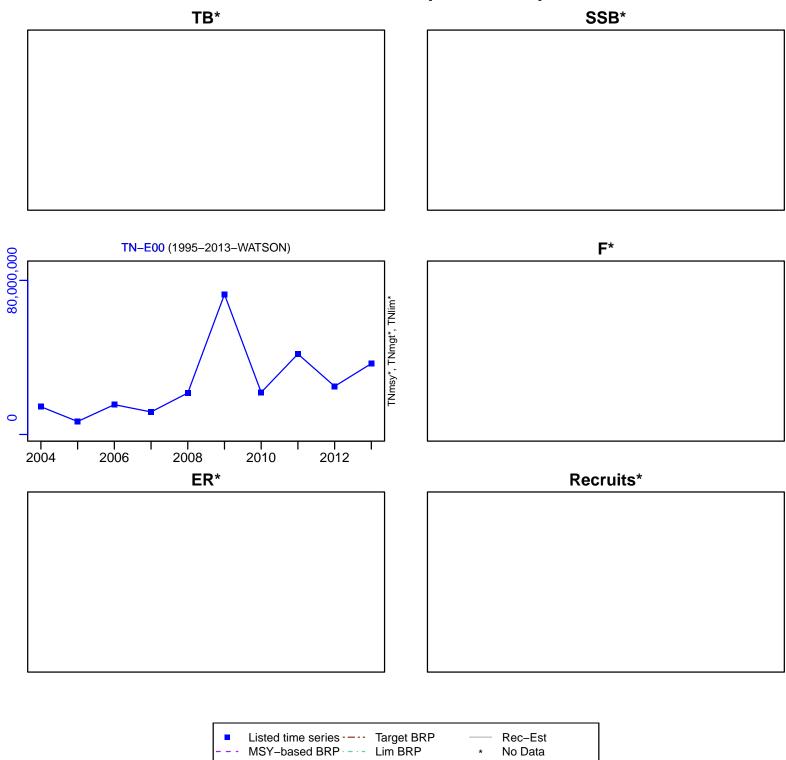
Metadata			
Scientific Name	Chionoecetes opilio		
Current Assess ID	DFO-NFLD-SNOWCRAB4R3Pn-1993-2018-ASHBROOK		
Area Division 4R3Pn			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Newfoundland Region		
Asmts in RAM	2018, 2013		

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

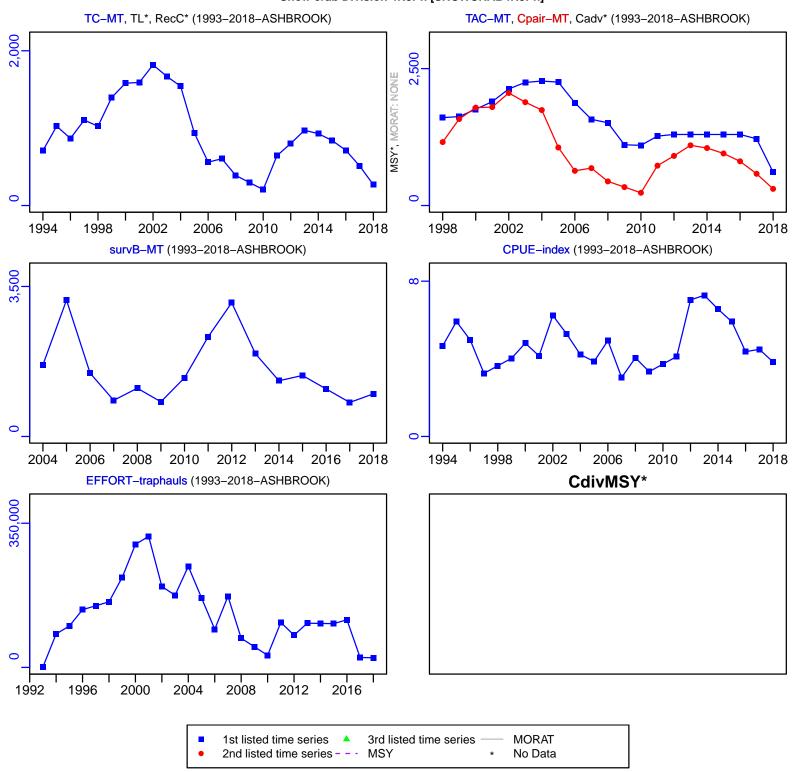
Time Series						
Туре	Type ID Asmt Year Curr Value					
ТВ	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	TN-E00	2013	$3.4 \times 10^{7}$	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	TC-MT	2018	250			
TL	TL-MT	2013	891			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data



No Data

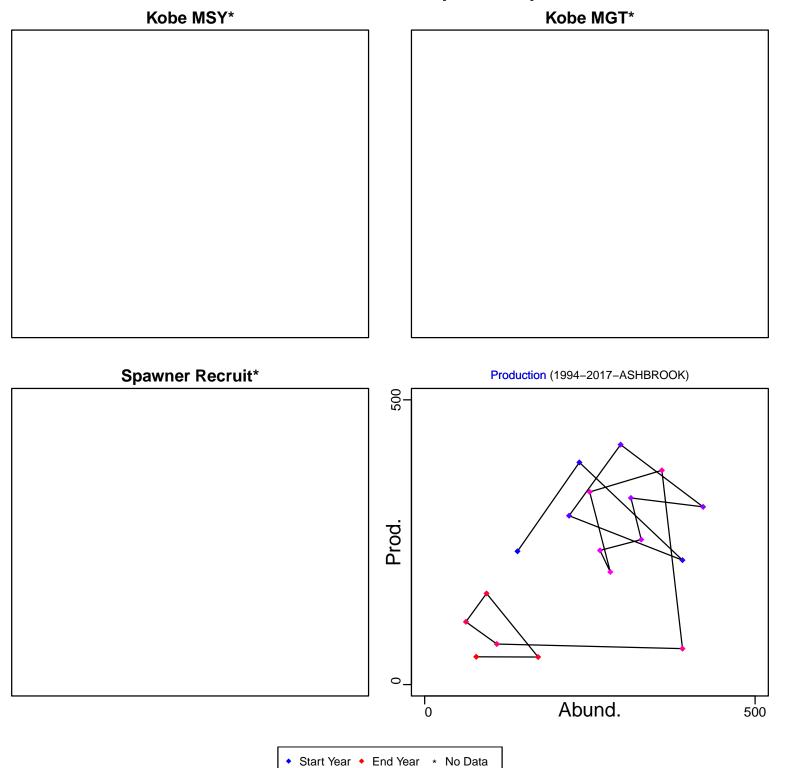


# Snow crab Western Scotian Shelf [SNOWCRAB4X]

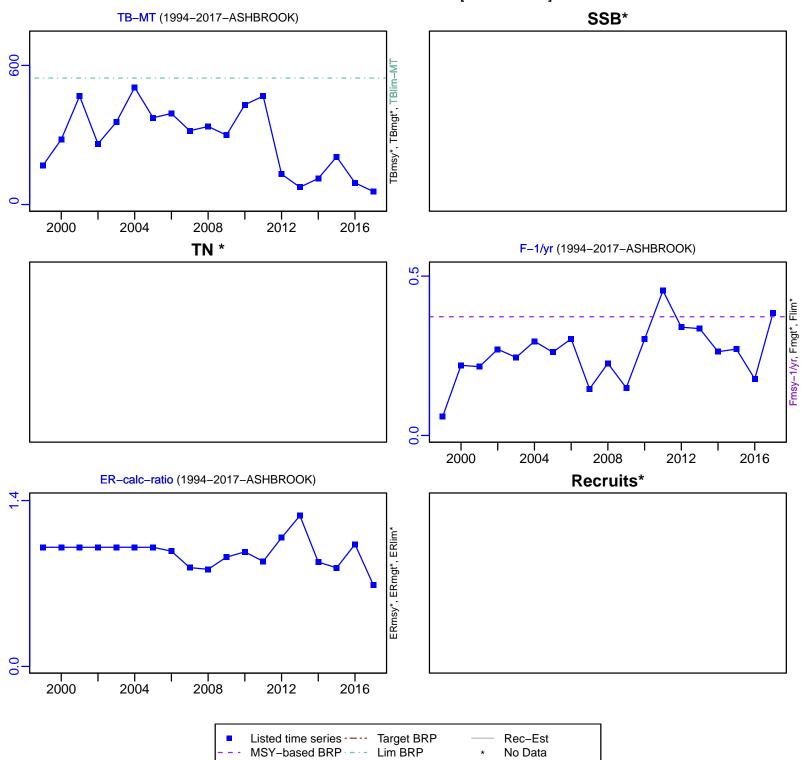
Metadata			
Scientific Name	Chionoecetes opilio		
Current Assess ID DFO-MAR-SNOWCRAB4X-1994-2017-ASHBROOK			
Area Western Scotian Shelf			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2017		

Reference Points						
Type ID Asmt Year Va						
TBmsy	-	-	-			
SSBmsy	-	-	-			
Fmsy	Fmsy-1/yr	2017	0.356			
ERmsy	-	-	-			
TBmgt	-	-	-			
SSBmgt	-	-	-			
Fmgt	-	-	-			
ERmgt	-	-	-			
TB0	TB0-MT	2017	1820			
SSB0	-	-	-			
MSY	-	-	-			
М	-	-	-			
TBlim	TBlim-MT	2017	455			
SSBlim	-	-	-			
Flim	-	-	-			
ERlim	-	-	-			

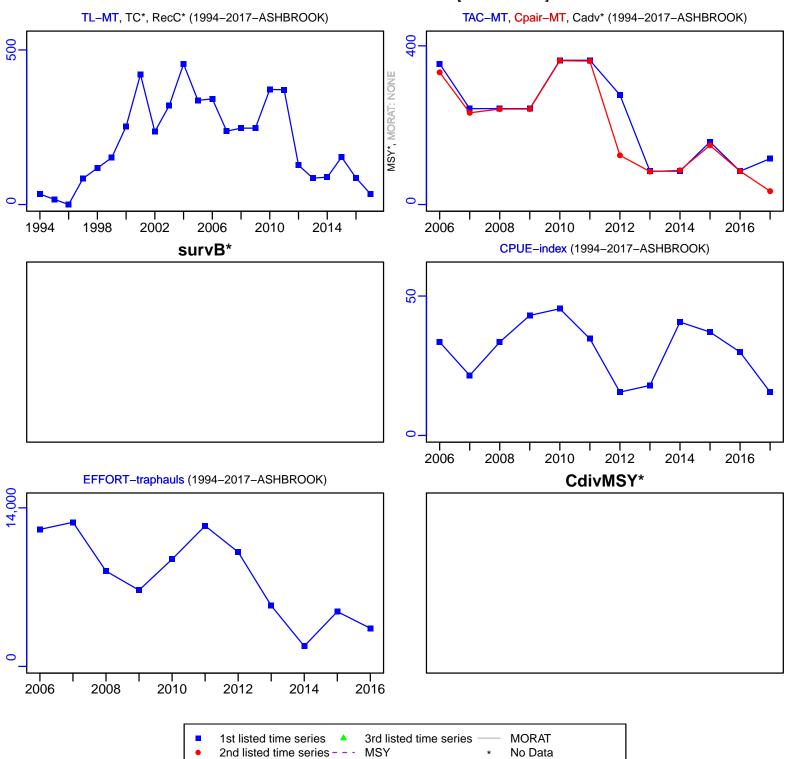
Time Series							
Туре	pe ID Asmt Year Curr Value						
ТВ	TB-MT	2017	47	-	-		
SSB	-	-	-	-	-		
TN	-	-	-	-	-		
R	-	-	-	-	-		
F	F-1/yr	2017	0.368	Males	-		
ER	ER-calc-ratio	2017	0.684	-	-		
TC	-	-	-				
TL	TL-MT	2017	32				
TB/TBmsy	-	-	-				
SSB/SSBmsy	-	-	-				
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	1.033				
ER/ERmsy	-	-	-				
TB/TBmgt	-	-	-				
SSB/SSBmgt	-	-	-				
F/Fmgt	-	-	-				
ER/ERmgt	-	-	-				



### Snow crab Western Scotian Shelf [SNOWCRAB4X]



### Snow crab Western Scotian Shelf [SNOWCRAB4X]

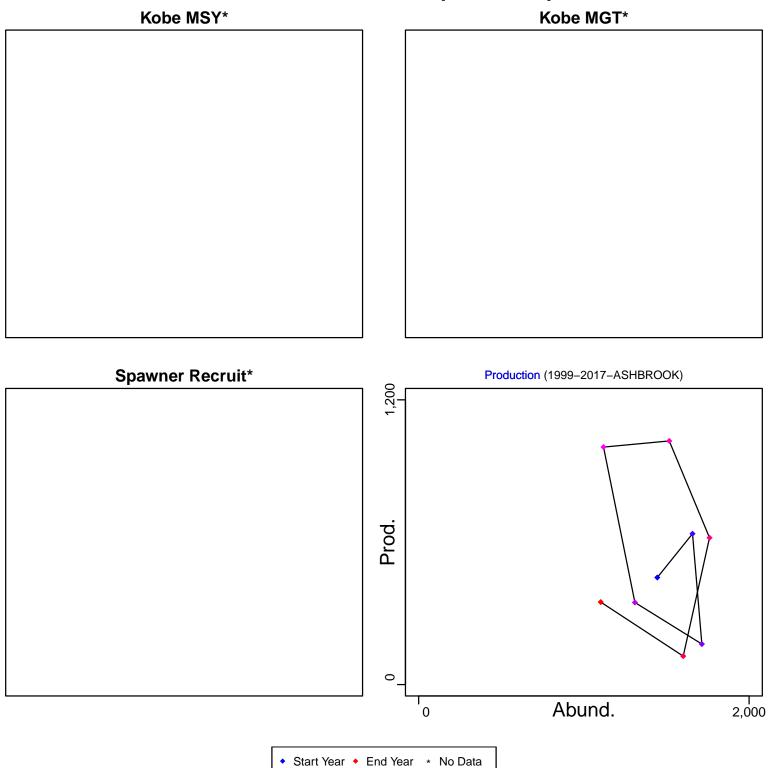


# Snow crab North-Eastern Nova Scotia [SNOWCRABNENS]

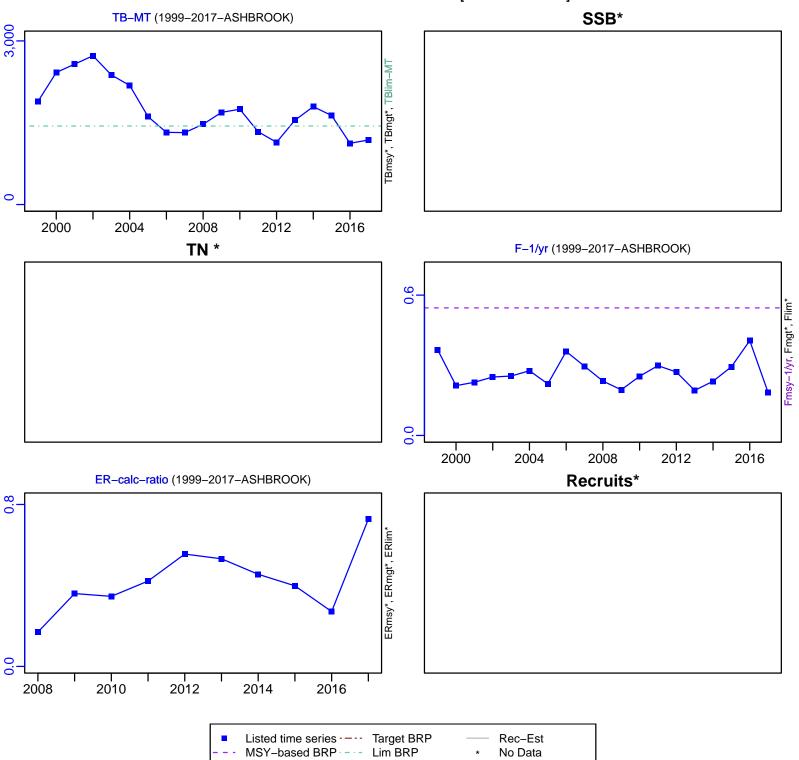
Metadata			
Scientific Name	Chionoecetes opilio		
Current Assess ID	DFO-MAR-SNOWCRABNENS-1999-2017-ASHBROOK		
Area North-Eastern Nova Scotia			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2017		

Reference Points				
Туре	Asmt Year	Value		
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	Fmsy-1/yr	2017	0.459	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	TB0-MT	2017	5650	
SSB0	-	-	-	
MSY	-	-	-	
M	-	-	-	
TBlim	TBlim-MT	2017	1412	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

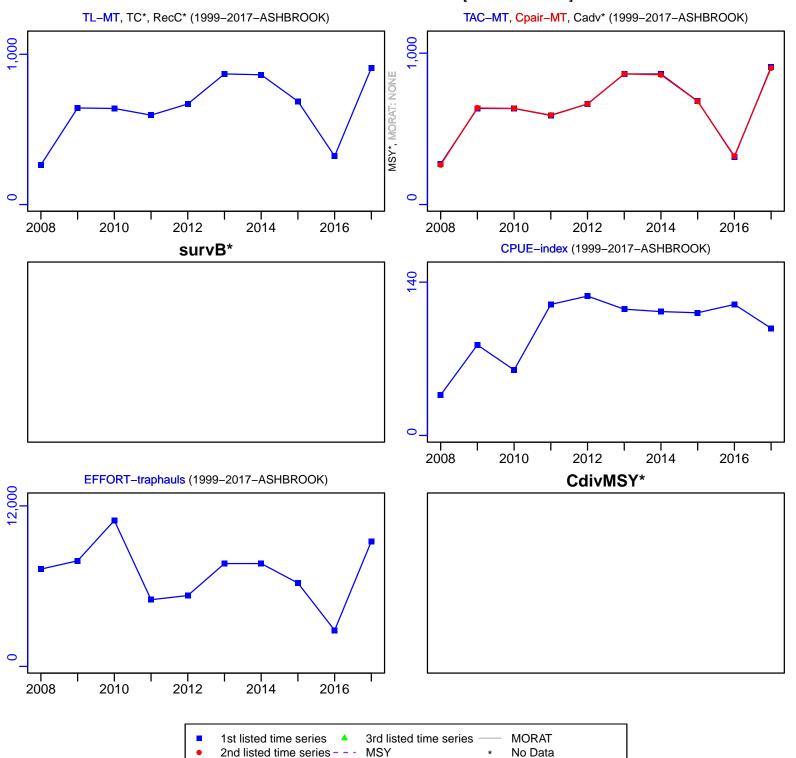
Time Series							
Туре	e ID Asmt Year Curr Value						
ТВ	TB-MT	2017	1160	-	-		
SSB	-	-	-	-	-		
TN	-	-	-	-	-		
R	-	-	-	-	-		
F	F-1/yr	2017	0.155	Males	-		
ER	ER-calc-ratio	2017	0.706	-	-		
TC	-	-	-				
TL	TL-MT	2017	819				
TB/TBmsy	-	-	-				
SSB/SSBmsy	-	-	-				
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.337				
ER/ERmsy	-	-	-				
TB/TBmgt	-	-	-				
SSB/SSBmgt	-	-	-				
F/Fmgt	-	-	-				
ER/ERmgt	-	-	-				



#### Snow crab North-Eastern Nova Scotia [SNOWCRABNENS]



#### Snow crab North-Eastern Nova Scotia [SNOWCRABNENS]



Metadata		
Scientific Name	Chionoecetes opilio	
Current Assess ID	DFO-QUE-SNOWCRABSCMA12-17-1979-2011-CHING	
Area	Northern Gulf of St. Lawrence	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2011	

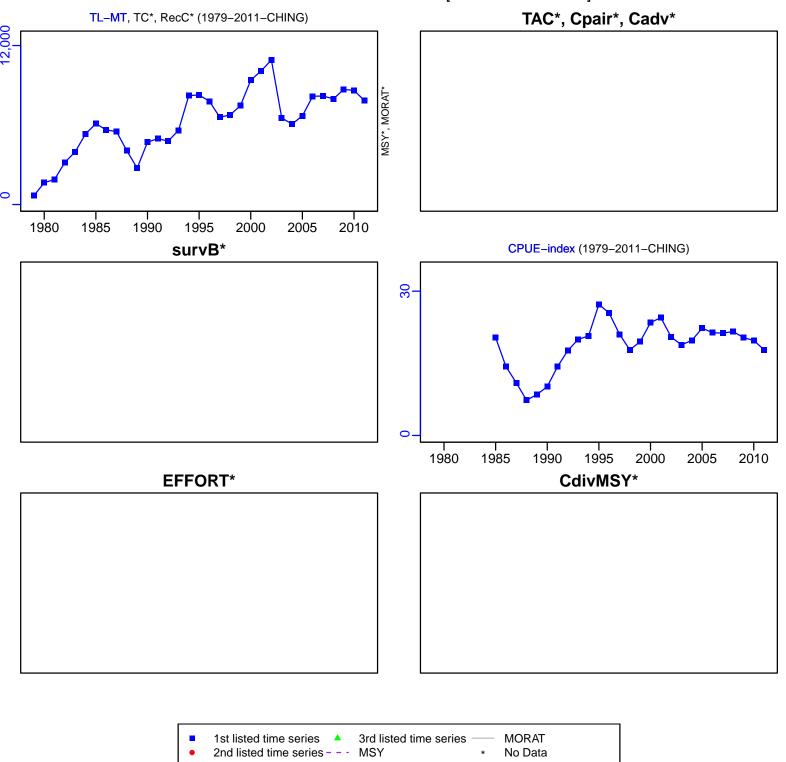
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2011	7490		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data

TB*	SSB*
TN *	F*
ER*	Recruits*
ER	Reciuits
■ Listed time series Ta MSY-based BRP Li	arget BRP — Rec-Est
MSY-based BRP Li	m BRP * No Data

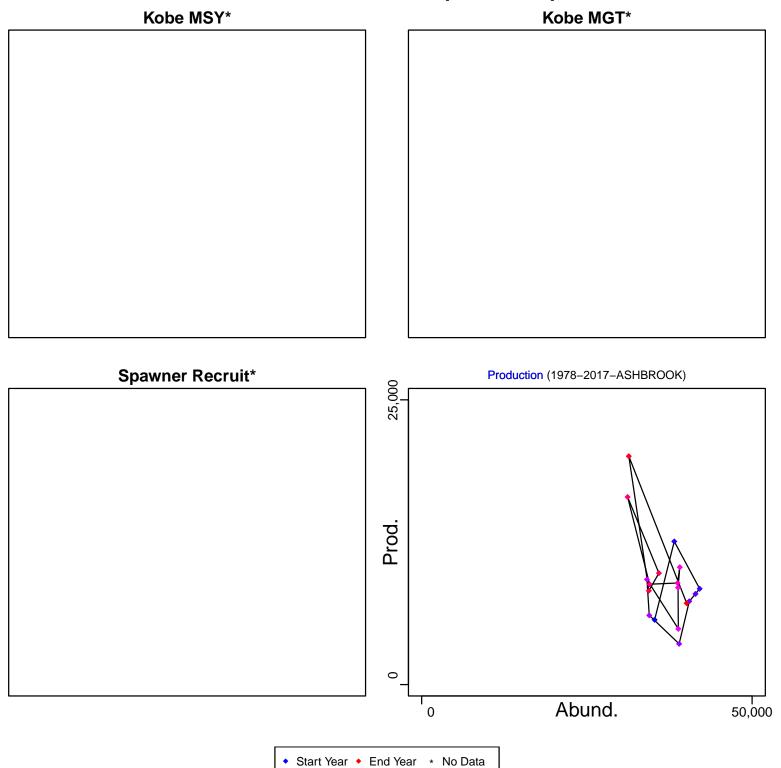


# **Snow crab South-Eastern Nova Scotia [SNOWCRABSENS]**

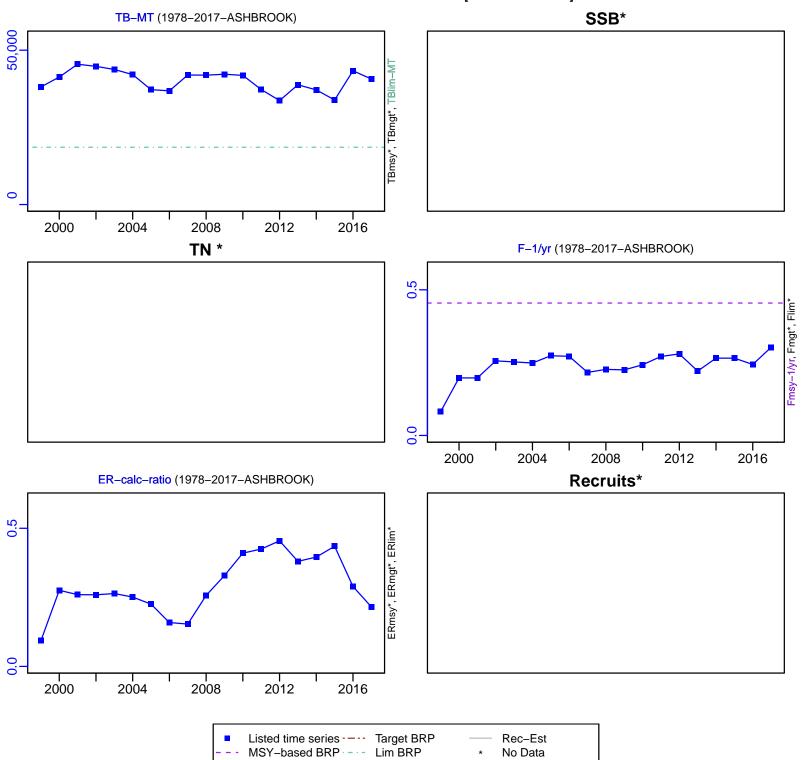
Metadata		
Scientific Name	Chionoecetes opilio	
Current Assess ID	DFO-MAR-SNOWCRABSENS-1978-2017-ASHBROOK	
Area	South-Eastern Nova Scotia	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Maritimes Region	
Asmts in RAM	2017	

Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	Fmsy-1/yr	2017	0.397	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	TB0-MT	2017	68,710	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	TBlim-MT	2017	17,178	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

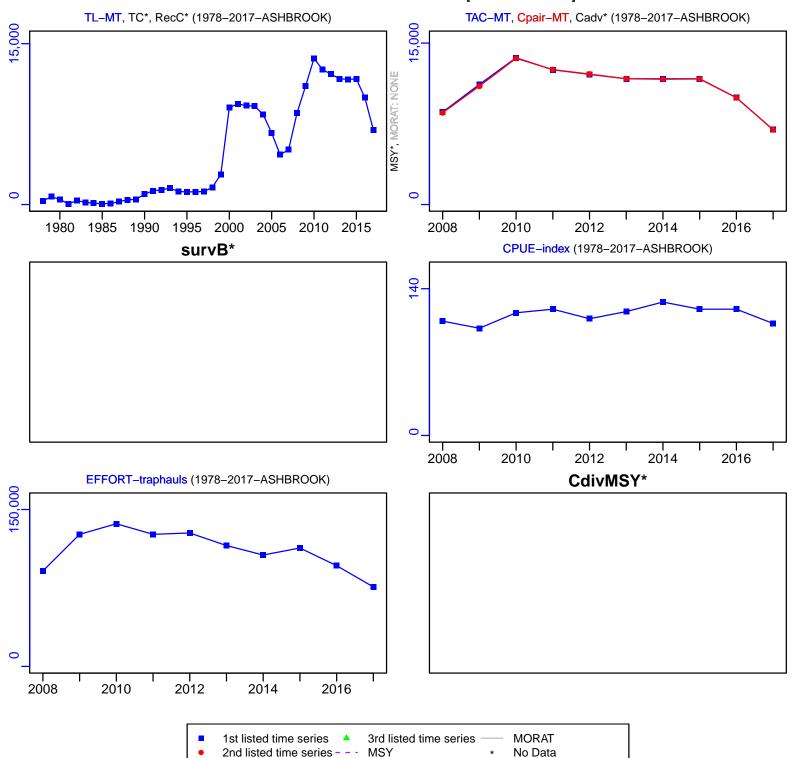
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2017	37,640	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2017	0.264	Males	-
ER	ER-calc-ratio	2017	0.179	-	-
TC	-	-	-		
TL	TL-MT	2017	6723		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.666		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



#### Snow crab South-Eastern Nova Scotia [SNOWCRABSENS]



#### Snow crab South-Eastern Nova Scotia [SNOWCRABSENS]

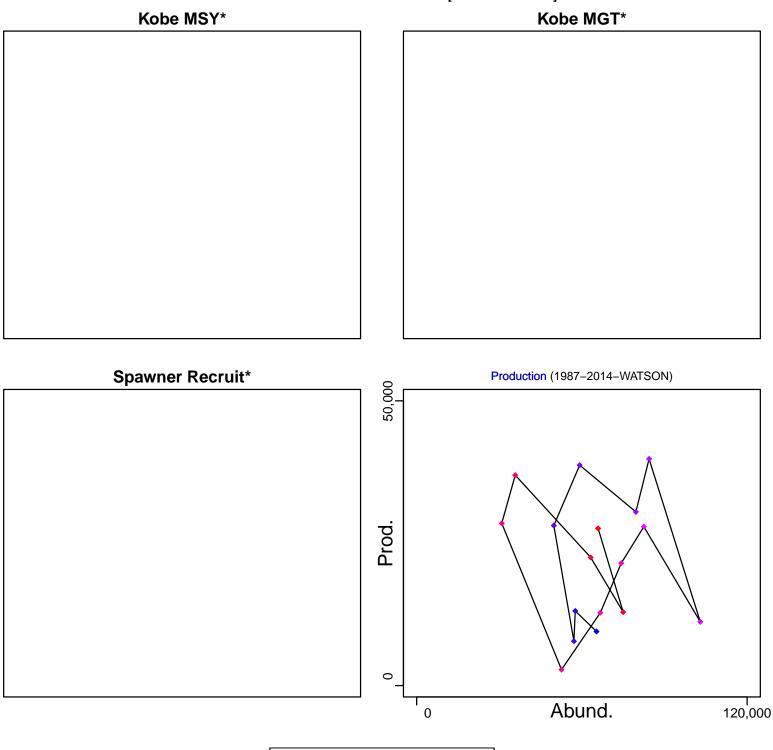


# Snow crab Southern Gulf of St. Lawrence [SNOWCRABSGSL]

Metadata		
Scientific Name	Chionoecetes opilio	
Current Assess ID	DFO-SG-SNOWCRABSGSL-1969-2019-ASHBROOK	
Area	Southern Gulf of St. Lawrence	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Southern Gulf Region	
Asmts in RAM	2019, 2007, 2014	

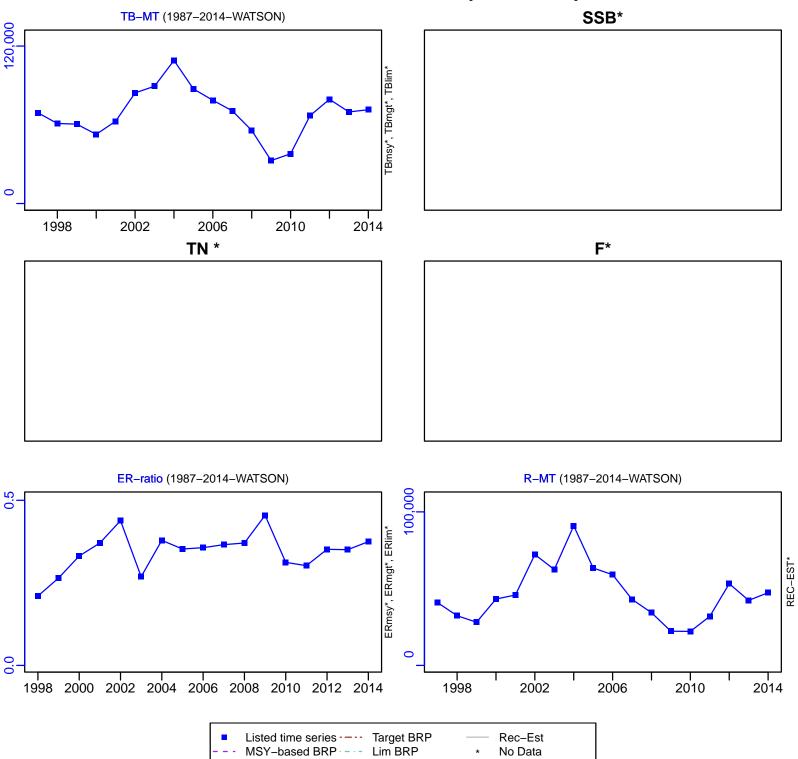
Reference Points				
Type	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	M-1/yr	2007	0.38	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2014	67,500	Males	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-MT	2014	43,600	Males	-
F	-	-	-	-	-
ER	ER-ratio	2014	0.371	-	-
TC	-	-	-		
TL	TL-MT	2019	24,260		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

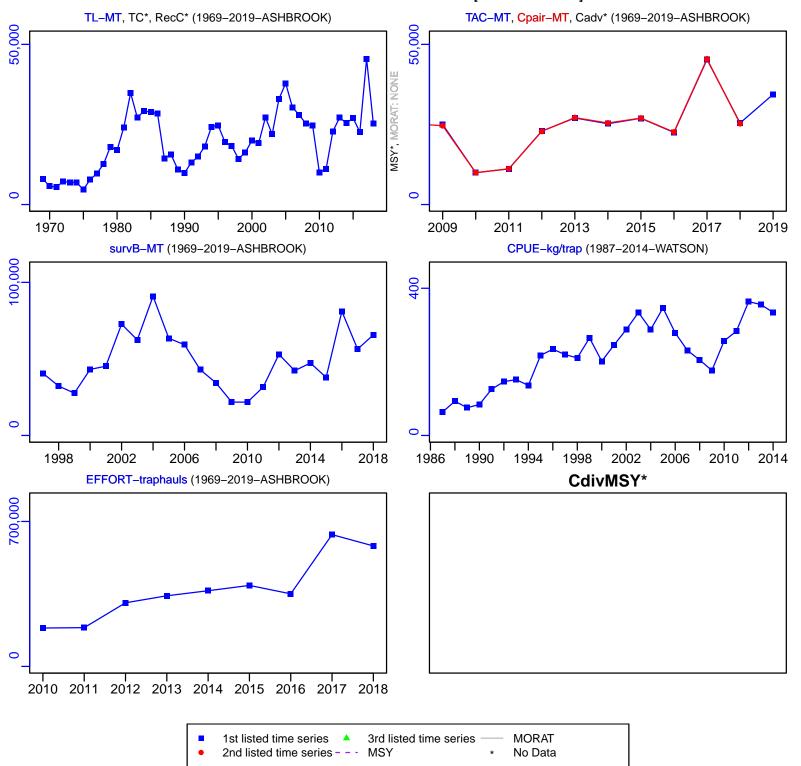


Start Year → End Year → No Data

### Snow crab Southern Gulf of St. Lawrence [SNOWCRABSGSL]



#### Snow crab Southern Gulf of St. Lawrence [SNOWCRABSGSL]



Metadata			
Scientific Name	Mya arenaria		
Current Assess ID	DFO-QUE-SSCLAMQCW-1900-2016-ASHBROOK		
Area	Quebec Coastal Waters		
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Quebec Region		
Asmts in RAM	2016, 2010		

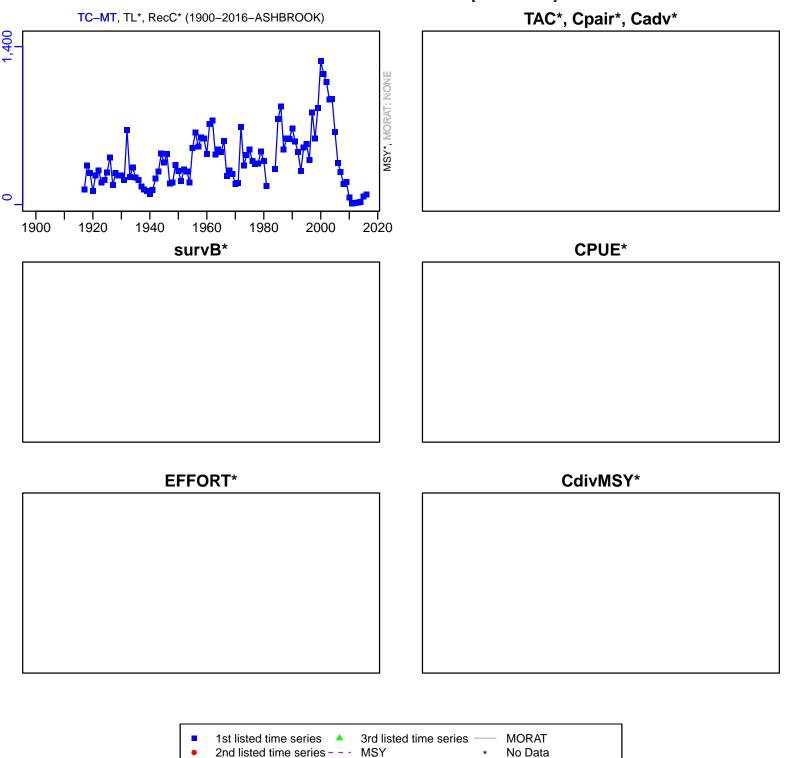
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	83		
TL	TL-MT	2010	55	1	
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*
ED*	De evvite*
ER*	Recruits*
	J L
■ Listed time series Ta	arget BRP — Rec-Est
Listed time series Ta	im BRP * No Data



Metadata			
Scientific Name	Pandalus montagui		
Current Assess ID	DFO-ARCTIC-STRSHRIMPNUNE-1978-2018-ASHBROOK		
Area Nunavut/Nunavik East			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Arctic Region		
Asmts in RAM	2018		

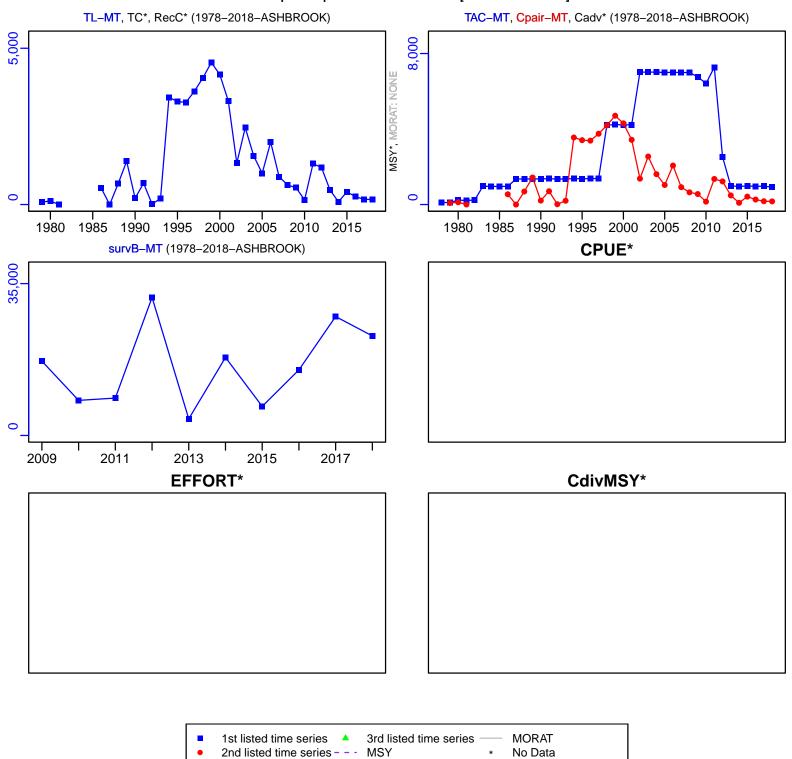
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	150		
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*
■ Listed time series Ta MSY-based BRP Li	arget BRP — Rec-Est
MSY-based BRP Li	m BRP * No Data



Metadata			
Scientific Name	Pandalus montagui		
Current Assess ID	DFO-ARCTIC-STRSHRIMPNUNW-1978-2018-ASHBROOK		
Area Nunavut/Nunavik West			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Arctic Region		
Asmts in RAM	2018		

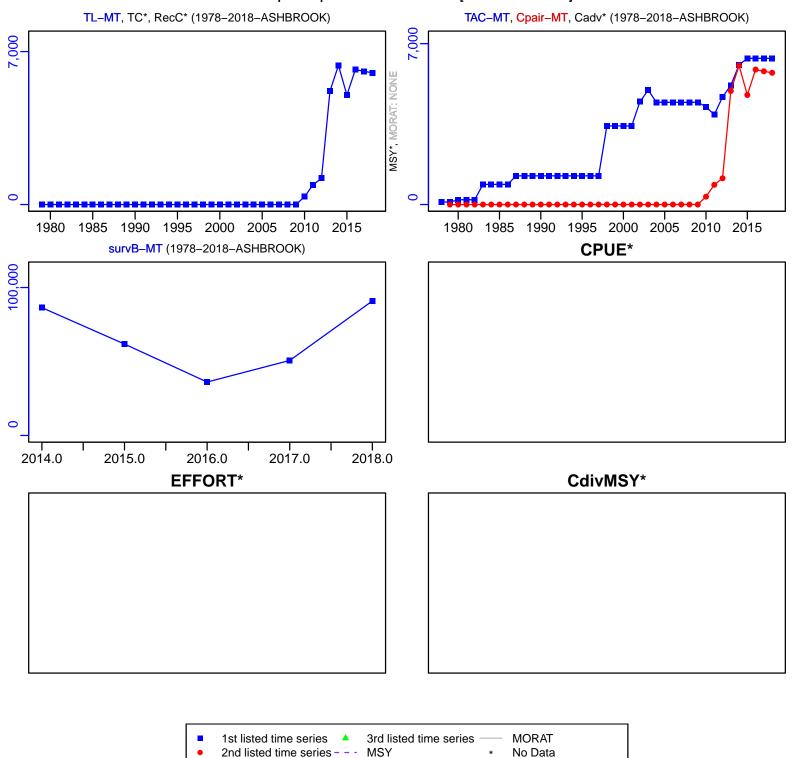
Reference Points					
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	-	-	-		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	-	-	-		
TBlim	-	-	-		
SSBlim	-	-	-		
Flim	-	-	-		
ERlim	-	-	-		

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	5530		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

◆ Start Year ◆ End Year \* No Data

TB*	SSB*
TN *	F*
ER*	Recruits*
	I L
Listed time series Ta MSY-based BRP Li	arget BRP — Rec-Est



Metadata		
Scientific Name	Pandalus montagui	
Current Assess ID	DFO-NFLD-STRSHRIMPSFA4-2002-2018-ASHBROOK	
Area	Shrimp Fishing Area 4	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Newfoundland Region	
Asmts in RAM	2018	

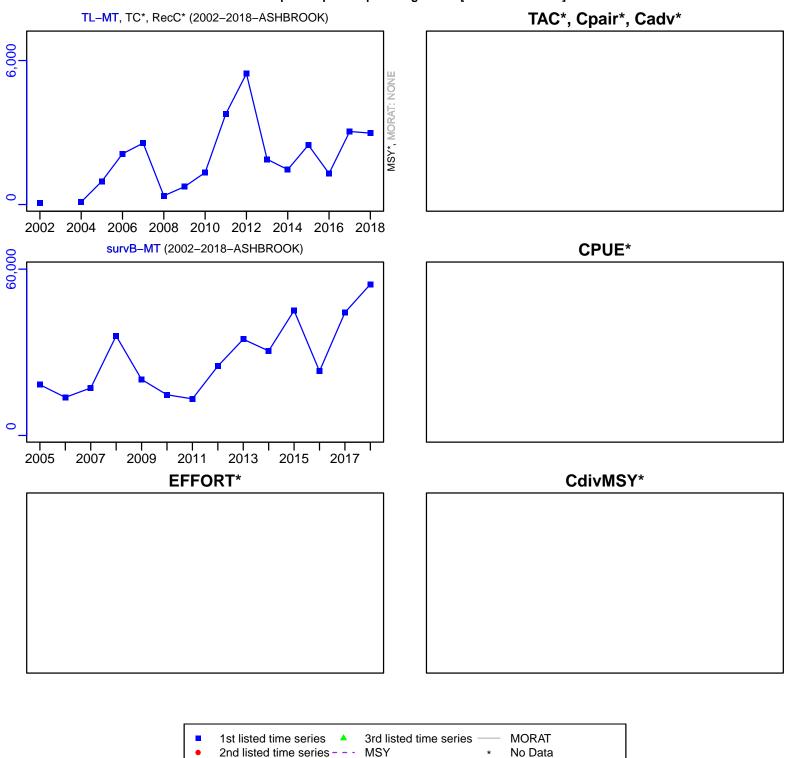
Reference Points			
Туре	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
М	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	2570		
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*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



Metadata		
Scientific Name	Spisula solidissima	
Current Assess ID	DFO-QUE-SURFIDLM-2002-2018-ASHBROOK	
Area	Iles-de-la-Madeleine	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Quebec Region	
Asmts in RAM	2018	

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	348		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	_	-		

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

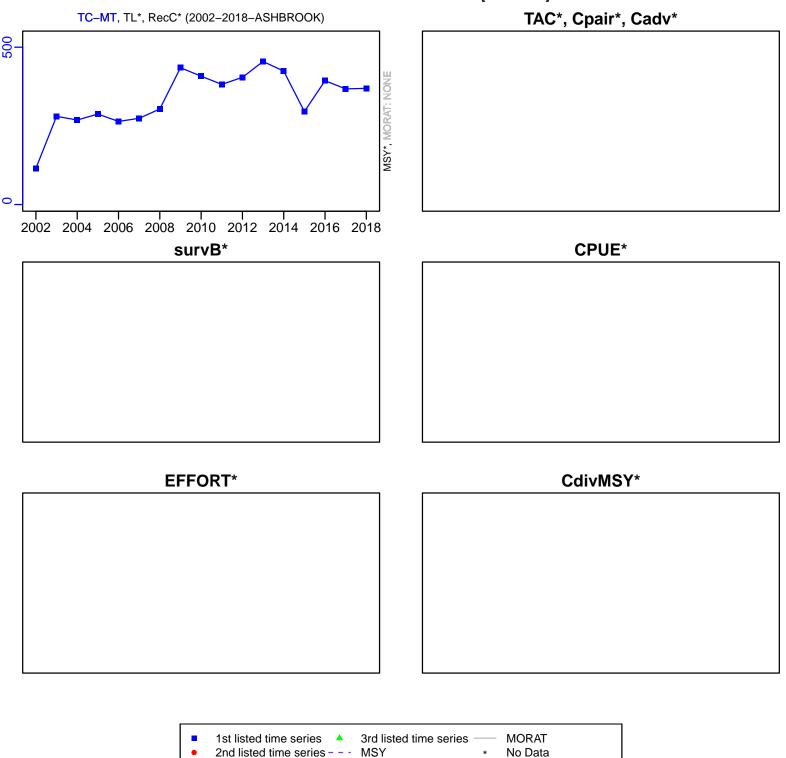
◆ Start Year ◆ End Year \* No Data

TB*	SSB*
TN *	<b>F</b> *
ER*	Recruits*
Γ	
■ Listed time series Ta	arget BRP — Rec-Est

Lim BRP

No Data

MSY-based BRP - - - -



# Thorny skate Grand Bank and St Pierre Bank [TSKA3LNOPs]

Metadata				
Scientific Name	Amblyraja radiata			
Current Assess ID	NAFO-SC-TSKA3LNOPs-1960-2014-OSGOOI			
Area	Grand Bank and St Pierre Bank			
Management Authority	Northwest Atlantic Fisheries Organization			
Assessor	NAFO Scientific Council			
Asmts in RAM	2014			

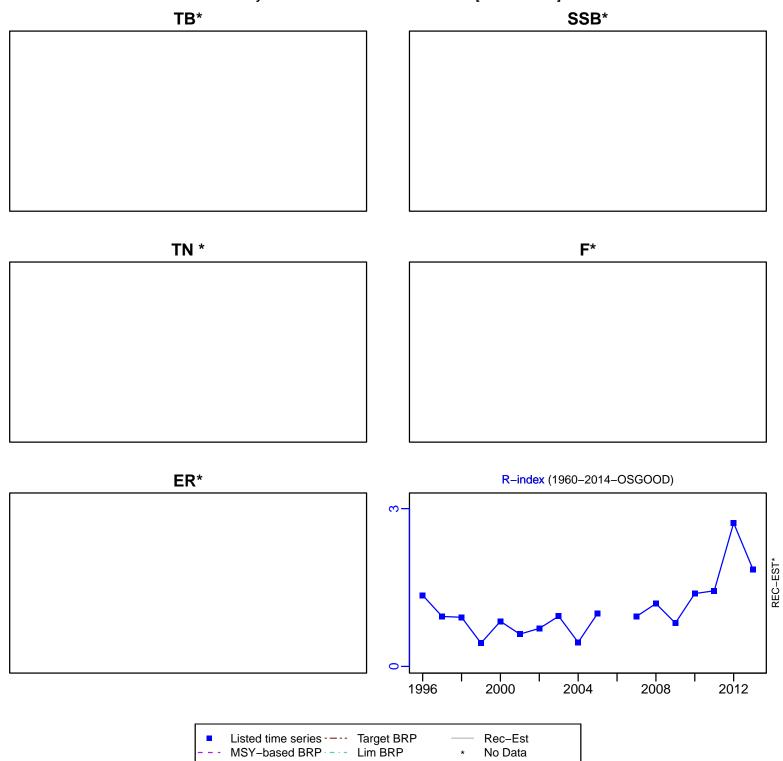
Reference Points							
Туре	ID	Asmt Year	Value				
TBmsy	-	-	-				
SSBmsy	-	-	-				
Fmsy	-	-	-				
ERmsy	-	-	-				
TBmgt	-	-	-				
SSBmgt	-	-	-				
Fmgt	-	-	-				
ERmgt	-	-	-				
TB0	-	-	-				
SSB0	-	-	-				
MSY	MSY-MT	2014	6653				
M	-	-	-				
TBlim	-	-	-				
SSBlim	-	-	-				
Flim	-	-	-				
ERlim	-	-	-				

Time Series								
Туре	ID	Asmt Year	Curr Value	Sex	Age			
ТВ	-	-	-	-	-			
SSB	-	-	-	-	-			
TN	-	-	-	-	-			
R	R-index	2014	1.74	Both	-			
F	-	-	-	-	-			
ER	-	-	-	-	-			
TC	-	-	-					
TL	TL-MT	2014	4640					
TB/TBmsy	-	-	-					
SSB/SSBmsy	-	-	-					
F/Fmsy	-	-	-					
ER/ERmsy	-	-	-					
TB/TBmgt	-	-	-					
SSB/SSBmgt	-	-	-					
F/Fmgt	-	-	-					
ER/ERmgt	-	-	-					

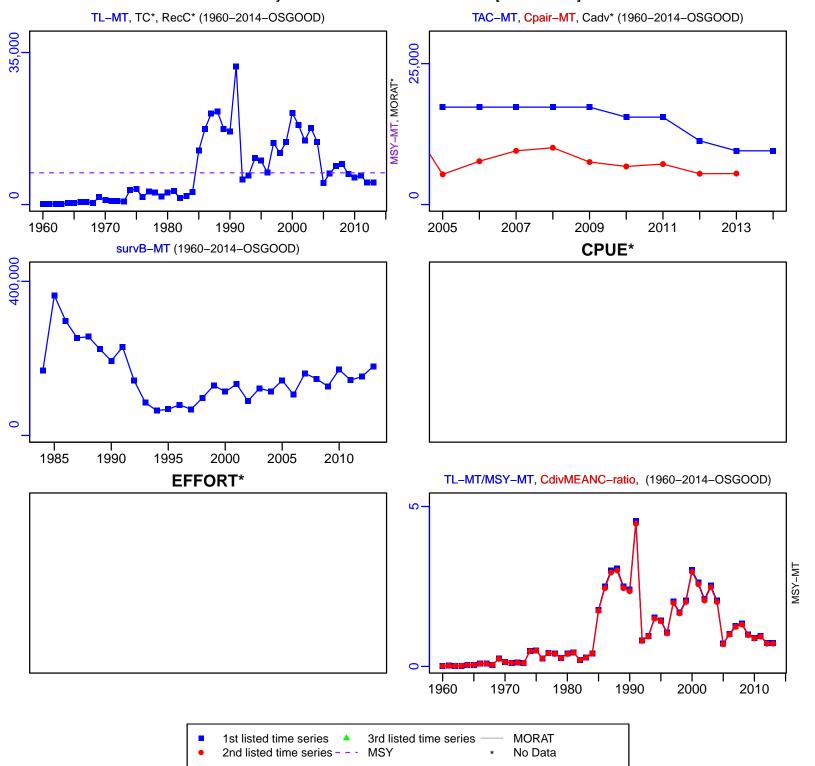
## Thorny skate Grand Bank and St Pierre Bank [TSKA3LNOPs]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

### Thorny skate Grand Bank and St Pierre Bank [TSKA3LNOPs]



#### Thorny skate Grand Bank and St Pierre Bank [TSKA3LNOPs]



# Thorny skate Southern Gulf of St. Lawrence [TSKA4T]

Metadata	
Scientific Name	Amblyraja radiata
Current Assess ID	DFO-SG-TSKA4T-1971-2010-OSGOOD
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf Region
Asmts in RAM	2010

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

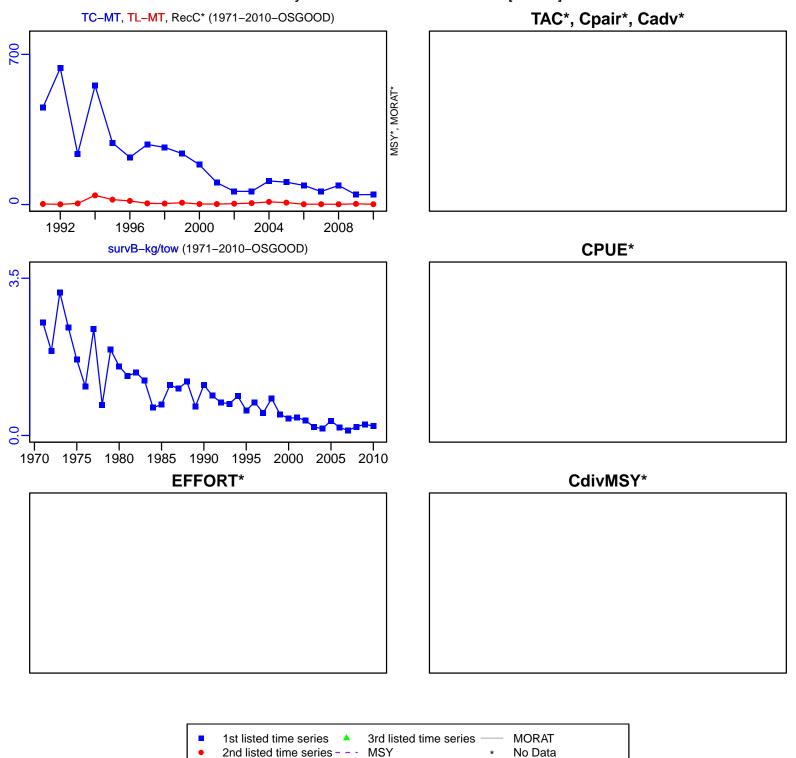
Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2010	42		
TL	TL-MT	2010	1.22		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

## Thorny skate Southern Gulf of St. Lawrence [TSKA4T]

Kobe MSY*	Kobe MGT*
Snawner Recruit*	Production*
Spawner Recruit*	Production*

## Thorny skate Southern Gulf of St. Lawrence [TSKA4T]

TB*	SSB*
TN *	F*
ER*	Recruits*
Listed time series Ta	arget BRP — Rec-Est



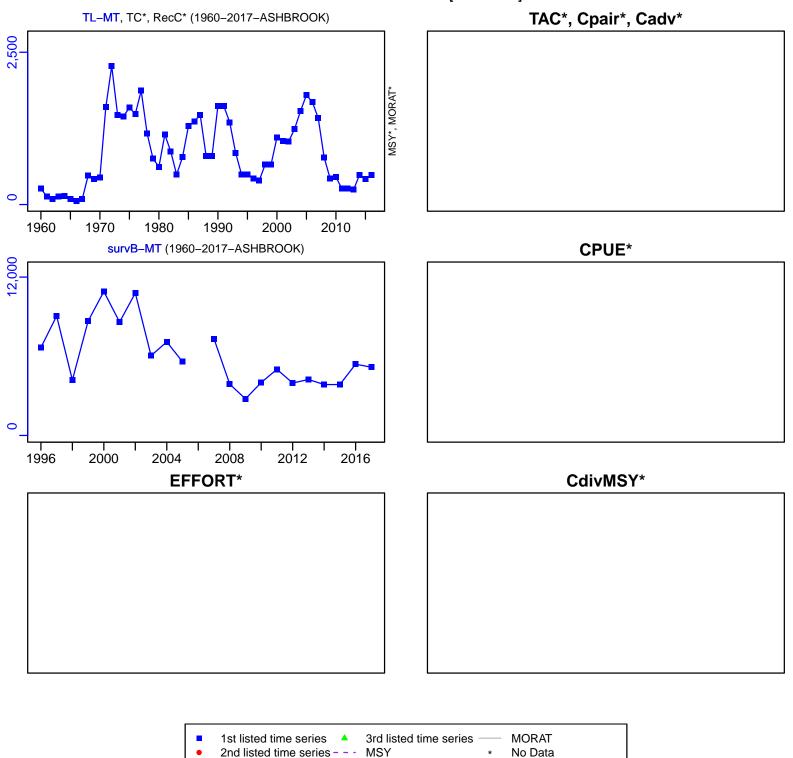
Metadata	
Scientific Name	Urophycis tenuis
Current Assess ID	NAFO-SC-WHAKE3Ps-1960-2017-ASHBROOK
Area	St. Pierre Bank
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2017

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	445		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec-Est m BRP * No Data



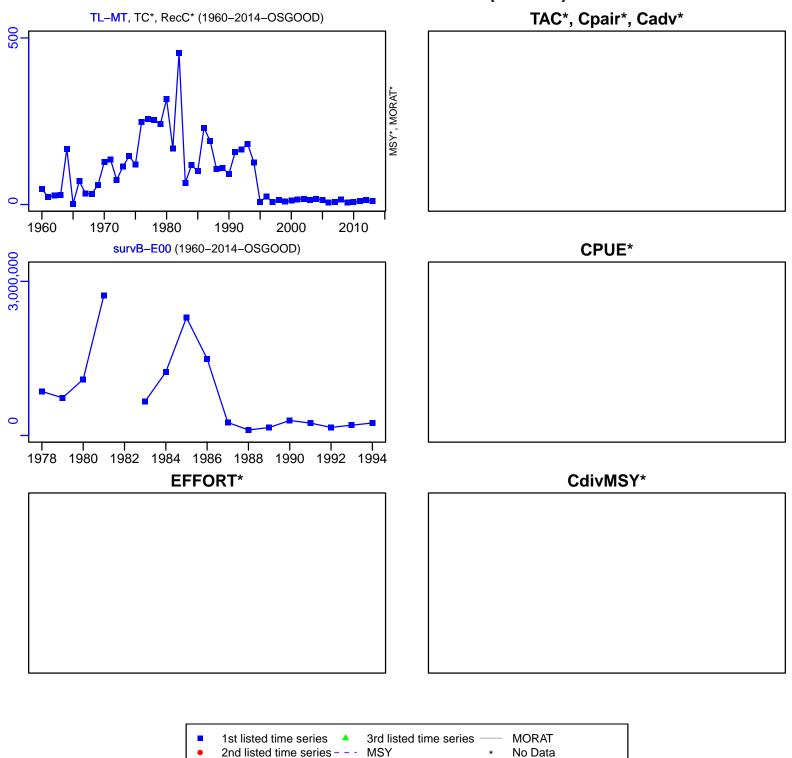
Metadata	
Scientific Name	Urophycis tenuis
Current Assess ID	DFO-QUE-WHAKE4RS-1960-2014-OSGOOD
Area	Northern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2014

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	10		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*
оринног постан	

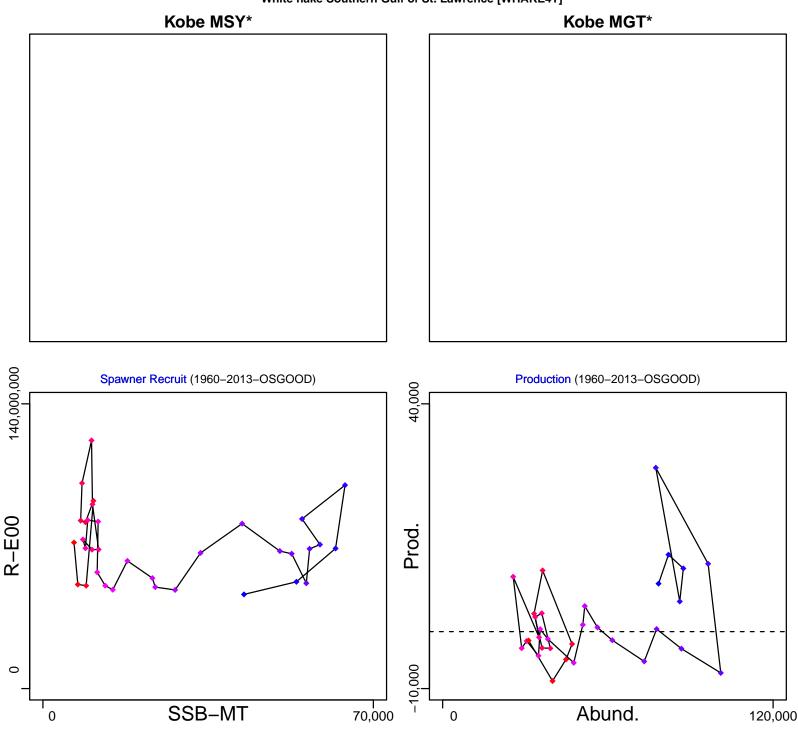
TB*	SSB*
TN *	F*
ER*	Recruits*
Listed time series Ta	arget BRP — Rec–Est im BRP * No Data

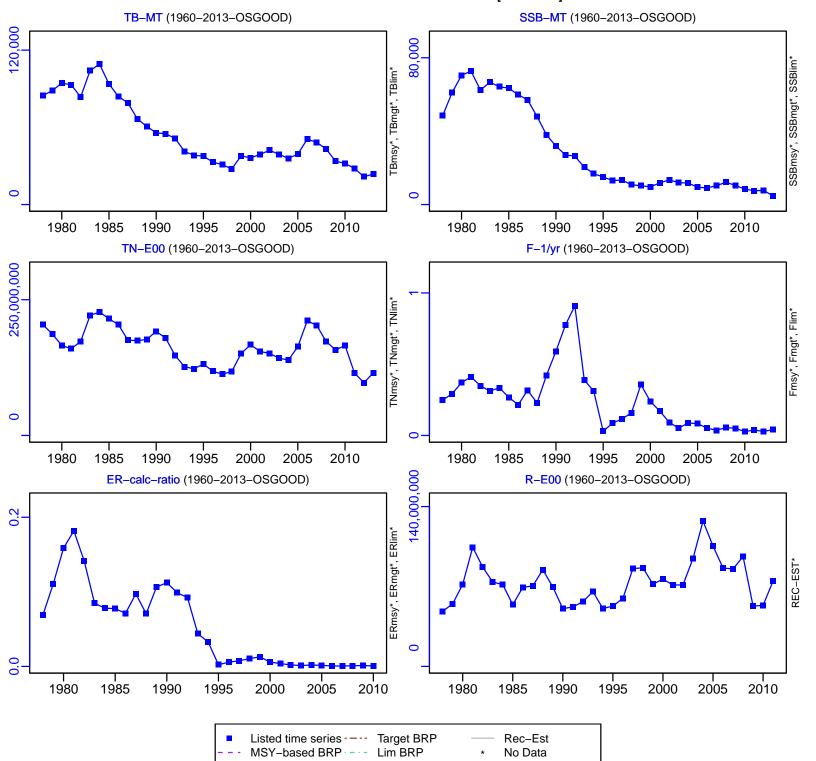


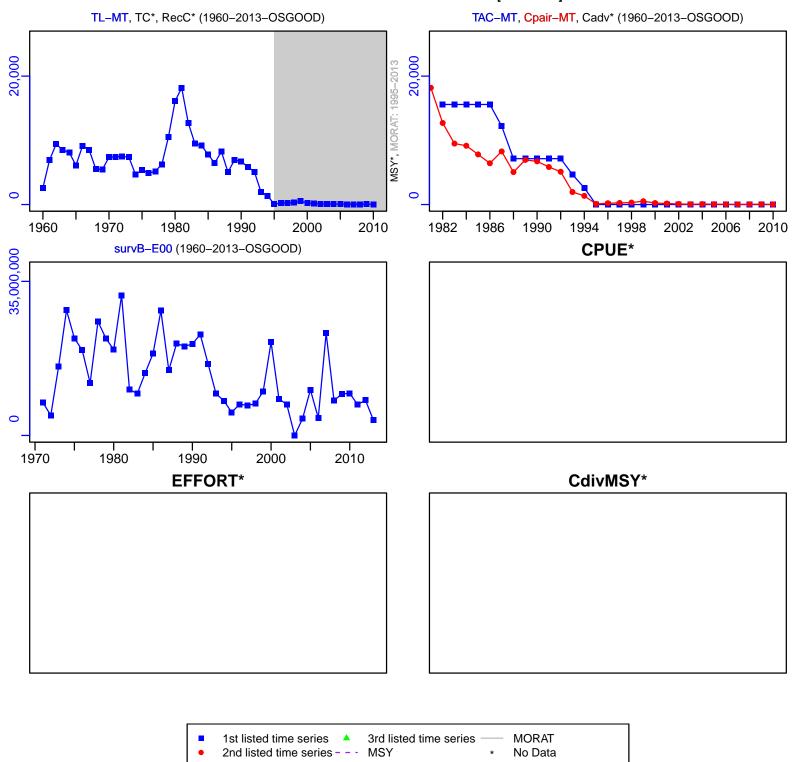
Metadata			
Scientific Name	Urophycis tenuis		
Current Assess ID	DFO-SG-WHAKE4T-1960-2013-OSGOOD		
Area Southern Gulf of St. Lawrence			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Southern Gulf Region		
Asmts in RAM	2013		

Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
M	M-1/yr	2013	1.078	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2013	21,900	Both	1+
SSB	SSB-MT	2013	4120	Both	4+
TN	TN-E00	2013	93,900,000	Both	1+
R	R-E00	2013	71,800,000	Both	-
F	F-1/yr	2013	0.035	Both	6+
ER	ER-calc-ratio	2013	0.001	-	-
TC	-	-	-		
TL	TL-MT	2013	15		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		







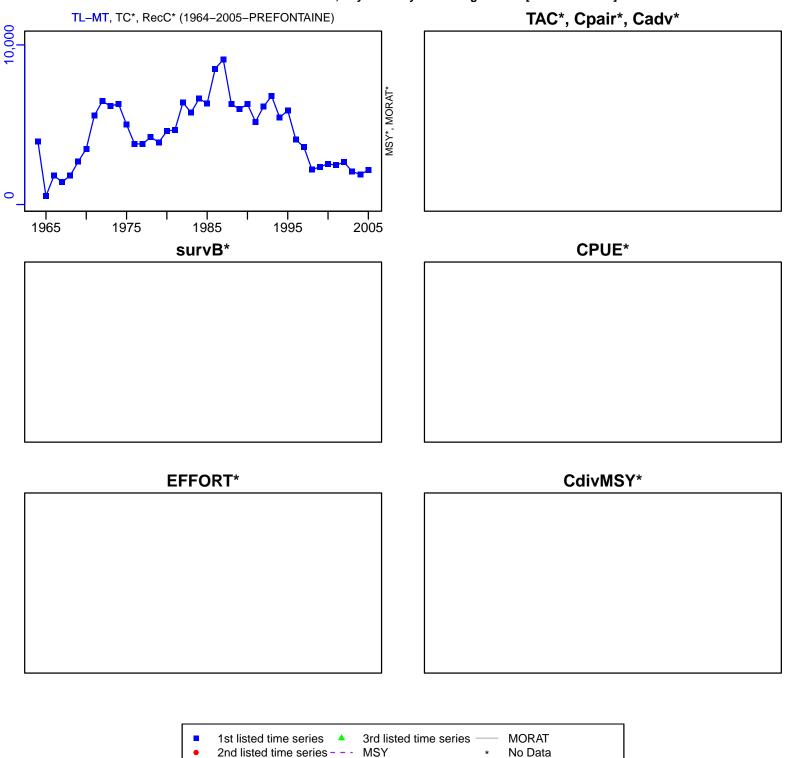
Metadata			
Scientific Name	Urophycis tenuis		
Current Assess ID	DFO-MAR-WHAKE4VWX5-1964-2005-PREFONTAINE		
Area Scotian Shelf, Bay of Fundy and Georges Bank			
Management Authority	Department of Fisheries and Oceans, Canada national management		
Assessor	Department of Fisheries and Oceans - Maritimes Region		
Asmts in RAM	2005		

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2005	2060		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*
TN *	<b>F</b> *
ER*	Pooruito*
EK	Recruits*
■ Listed time series Ta	arget BRP — Rec-Est
<ul><li>Listed time series Ta</li><li> MSY-based BRP Li</li></ul>	m BRP * No Data

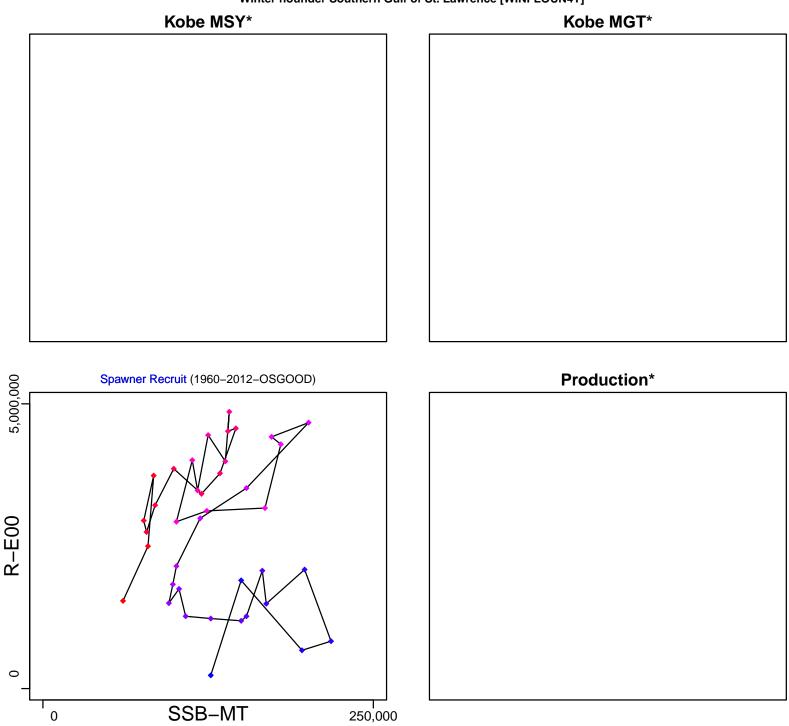


# Winter flounder Southern Gulf of St. Lawrence [WINFLOUN4T]

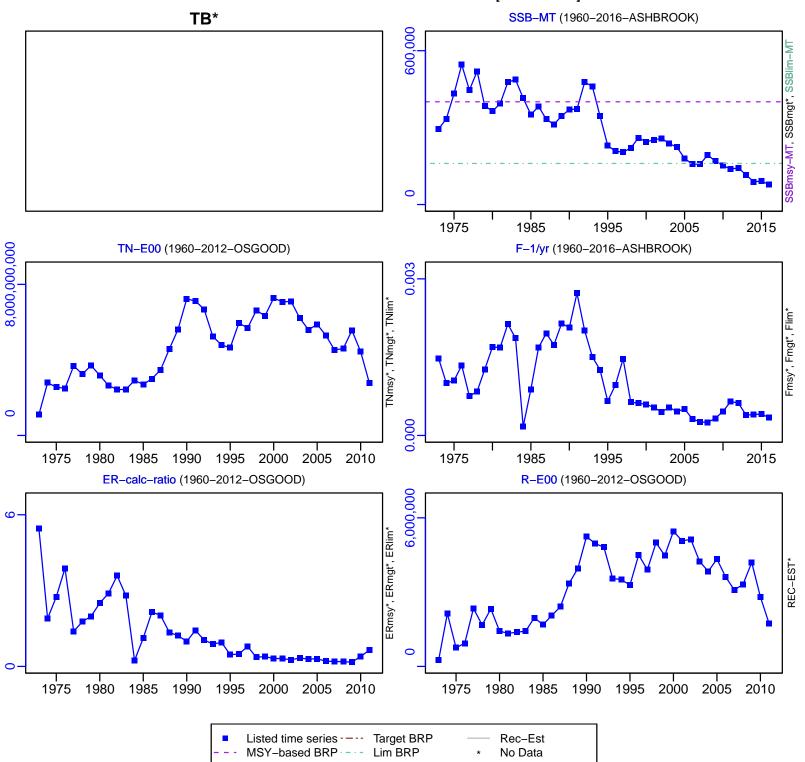
	Metadata
Scientific Name	Pseudopleuronectes americanus
Current Assess ID	DFO-SG-WINFLOUN4T-1960-2016-ASHBROOK
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf Region
Asmts in RAM	2011, 2012, 2016

	Reference Points				
Туре	ID	Asmt Year	Value		
TBmsy	-	-	-		
SSBmsy	SSBmsy-MT	2016	369,600		
Fmsy	-	-	-		
ERmsy	-	-	-		
TBmgt	-	-	-		
SSBmgt	-	-	-		
Fmgt	-	-	-		
ERmgt	-	-	-		
TB0	-	-	-		
SSB0	-	-	-		
MSY	-	-	-		
М	M-1/yr	2016	1.02		
TBlim	-	-	-		
SSBlim	SSBlim-MT	2016	147,800		
Flim	-	-	-		
ERlim	-	-	-		

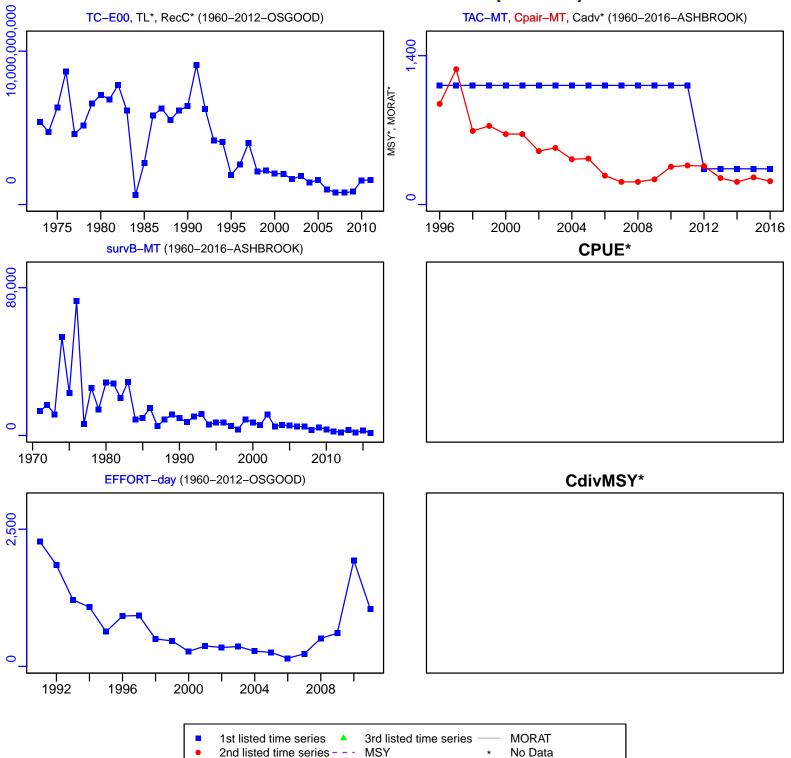
	Time	Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2016	72,254	-	-
TN	TN-E00	2012	$2.52 \times 10^{9}$	Both	3+
R	R-E00	2012	1,540,000	Both	-
F	F-1/yr	2016	0	-	5+
ER	ER-calc-ratio	2012	0.583	-	-
TC	TC-E00	2012	$1.47 \times 10^{9}$		
TL	TL-MT	2016	196		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	0.195		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



#### Winter flounder Southern Gulf of St. Lawrence [WINFLOUN4T]



#### Winter flounder Southern Gulf of St. Lawrence [WINFLOUN4T]



# Witch flounder Southern Labrador-Eastern Newfoundland [WITFLOUN2J3KL]

Metadata		
Scientific Name	Glyptocephalus cynoglossus	
Current Assess ID	DFO-NFLD-WITFLOUN2J3KL-1960-2017-ASHBROOK	
Area	Southern Labrador-Eastern Newfoundland	
Management Authority	Department of Fisheries and Oceans, Canada national management	
Assessor	Department of Fisheries and Oceans - Newfoundland Region	
Asmts in RAM	2017	

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

		Time Series	}		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	190		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

## Witch flounder Southern Labrador-Eastern Newfoundland [WITFLOUN2J3KL]

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

Witch flounder Southern Labrador–Eastern Newfoundland [WITFLOUN2J3KL]

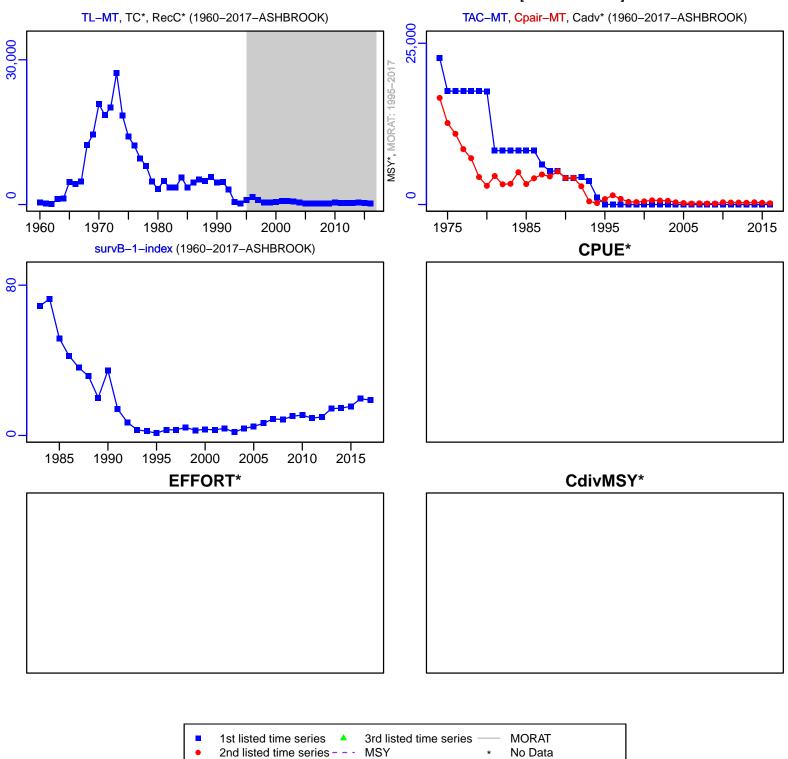
TB\*

SSB\*

TN *	F*
ER*	Recruits*

■ Listed time series ---- Target BRP — Rec-Est
--- MSY-based BRP ---- Lim BRP \* No Data

#### Witch flounder Southern Labrador-Eastern Newfoundland [WITFLOUN2J3KL]



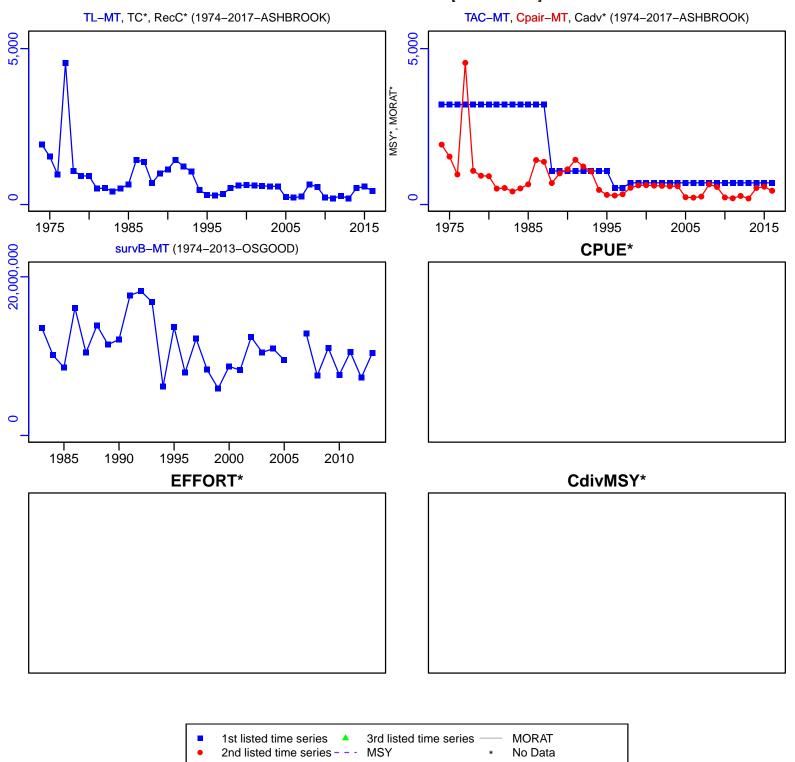
	Metadata
Scientific Name	Glyptocephalus cynoglossus
Current Assess ID	DFO-NFLD-WITFLOUN3Ps-1974-2017-ASHBROOK
Area	St. Pierre Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Newfoundland Region
Asmts in RAM	2013, 2017

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

Time Series					
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	412		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*	Kobe MGT*
Spawner Recruit*	Production*

TB*	SSB*				
TN *	F*				
ER*	Recruits*				
■ Listed time series T	orgat PPD —— Pop Est				
Listed time series Target BRP — Rec-Est MSY-based BRP Lim BRP * No Data					



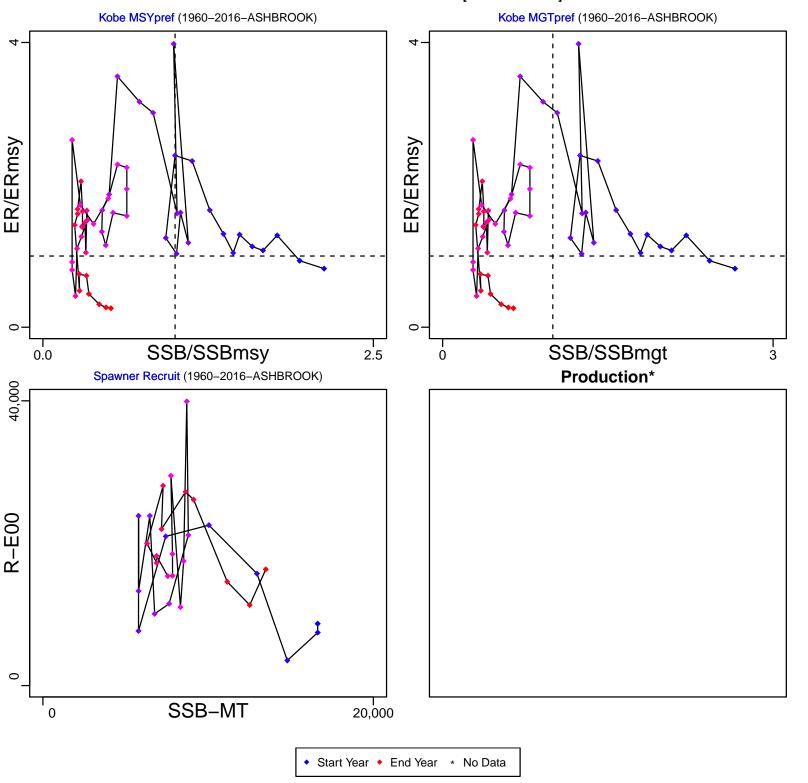
# Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]

Metadata				
Scientific Name	Glyptocephalus cynoglossus			
Current Assess ID	DFO-SG-WITFLOUN4RST-1960-2016-ASHBROOK			
Area	Gulf of St. Lawrence			
Management Authority	ity Department of Fisheries and Oceans, Canada national managemen			
Assessor	Department of Fisheries and Oceans - Southern Gulf Region			
Asmts in RAM	2011, 2016			

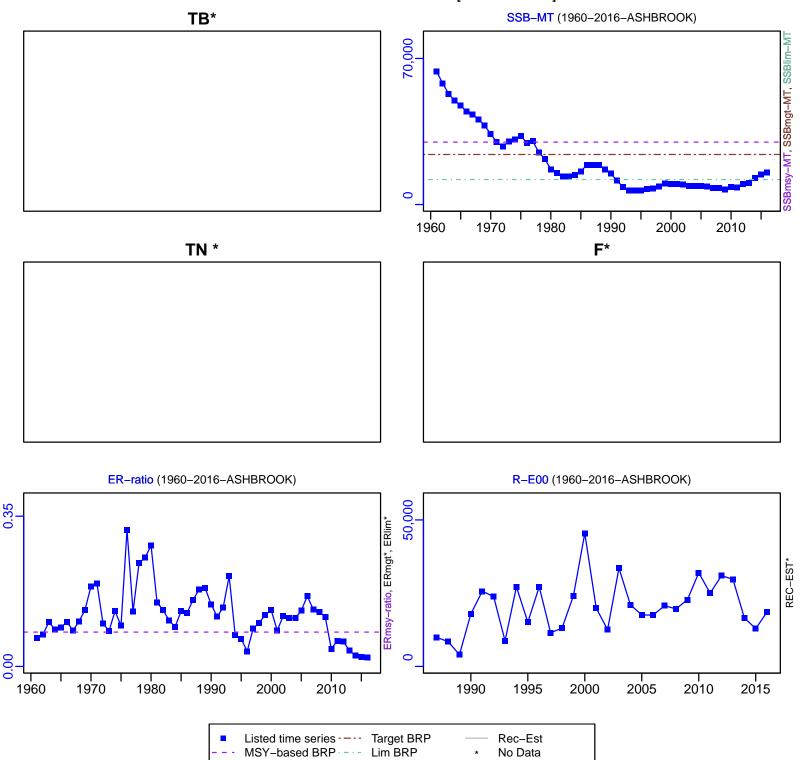
Reference Points						
Туре	ID	Asmt Year	Value			
TBmsy	TBmsy-calc-MT	2016	363,889			
SSBmsy	SSBmsy-MT	2016	26,200			
Fmsy	-	-	-			
ERmsy	ERmsy-ratio	2016	0.072			
TBmgt	-	-	-			
SSBmgt	SSBmgt-MT	2016	21,000			
Fmgt	-	-	-			
ERmgt	ERmgt-ratio	2011	0.07			
TB0	-	-	-			
SSB0	-	-	-			
MSY	MSY-MT	2016	26,200			
М	-	-	-			
TBlim	-	-	-			
SSBlim	SSBlim-MT	2016	10,500			
Flim	-	-	-			
ERlim	-	-	-			

Time Series								
Туре	ID	Asmt Year	Curr Value	Sex	Age			
ТВ	-	-	-	-	-			
SSB	SSB-MT	2016	13,489	-	-			
TN	-	-	-	-	-			
R	R-E00	2016	16,327	-	-			
F	-	-	-	-	-			
ER	ER-ratio	2016	0.019	-	-			
TC	-	-	-					
TL	TL-MT	2016	296					
TB/TBmsy	-	-	-					
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	0.515					
F/Fmsy	-	-	-					
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.266					
TB/TBmgt	-	-	-					
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2016	0.642					
F/Fmgt	-	-	-					
ER/ERmgt	-	-	-					

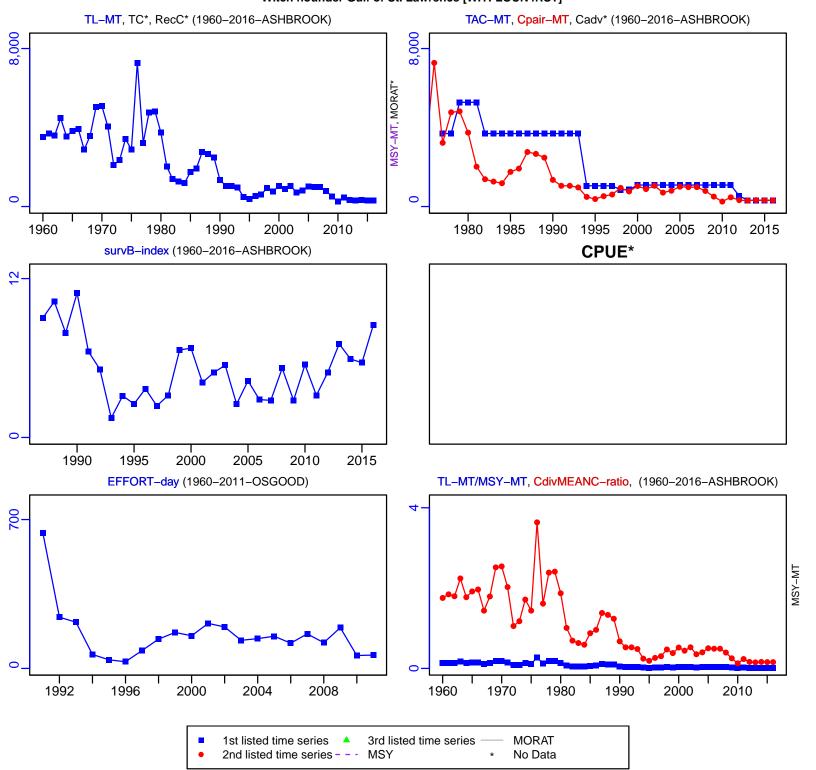
### Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]



### Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]



#### Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]



	Metadata
Scientific Name	Buccinum undatum
Current Assess ID	DFO-QUE-WWHELKQCW-1984-2017-ASHBROOK
Area	Quebec Coastal Waters
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2017, 2011

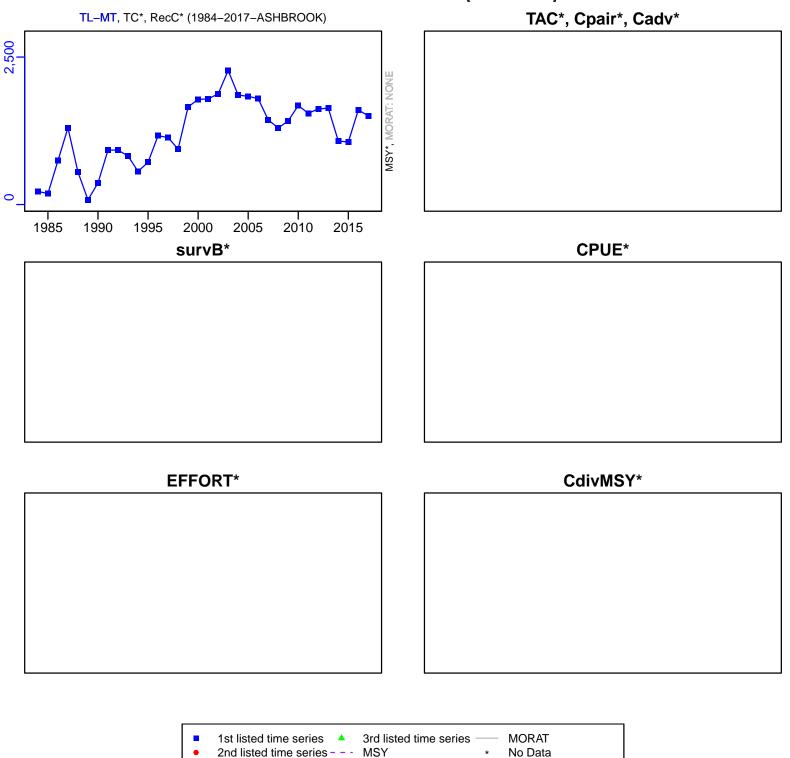
F	Refere	Reference Points		
Туре	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	-	-	-	
Fmsy	-	-	-	
ERmsy	-	-	-	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	-	-	-	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

		Time Series	}		
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	1329		
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

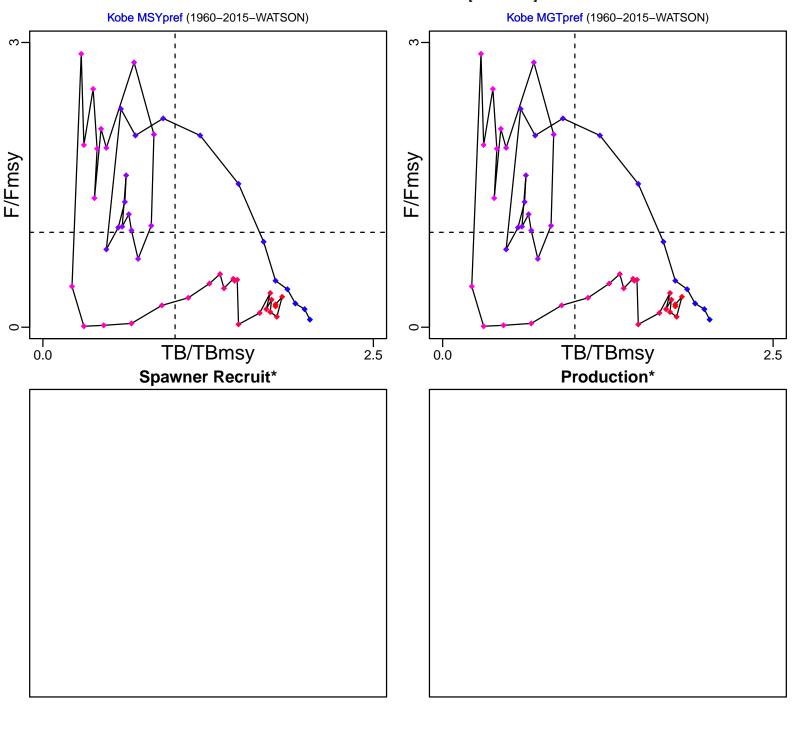
TB*	SSB*
TN *	F*
ER*	Recruits*
Γ	
Listed time series Ta	arget BRP — Rec–Est m BRP * No Data



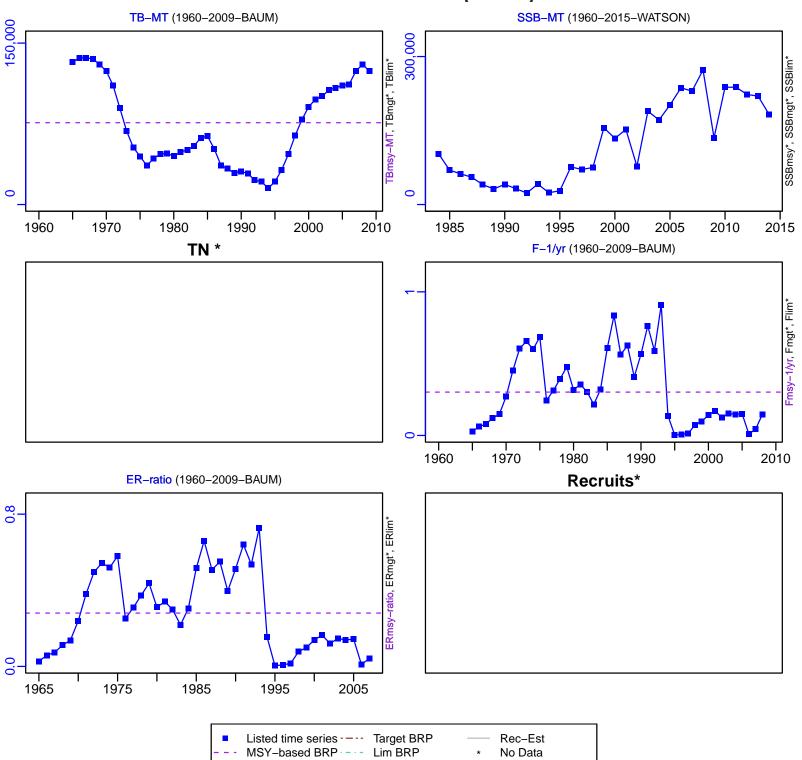
	Metadata
Scientific Name	Limanda ferruginea
Current Assess ID	NAFO-SC-YELL3LNO-1960-2015-WATSON
Area	Grand Banks
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2009, 2015

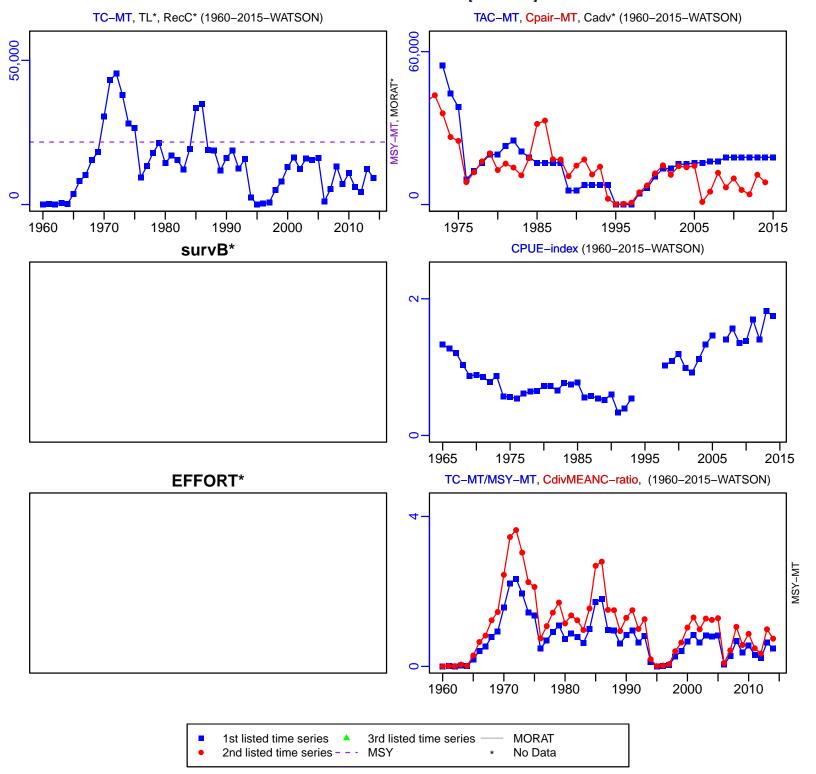
Reference Points				
Туре	ID	Asmt Year	Value	
TBmsy	TBmsy-MT	2009	73,580	
SSBmsy	-	-	-	
Fmsy	Fmsy-1/yr	2009	0.26	
ERmsy	ERmsy-ratio	2009	0.256	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	-	-	-	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	MSY-MT	2015	18,730	
М	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	-	-	-	
ERlim	-	-	-	

	Time S	Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	TB-MT	2009	120,000	-	-
SSB	SSB-MT	2015	162,000	Females	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2009	0.126	-	-
ER	ER-ratio	2009	0.039	-	-
TC	TC-MT	2015	7990		
TL	-	-	-		
TB/TBmsy	TBdivTBmsy-dimensionless	2015	1.76		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2015	0.22		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.151		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Start Year • End Year \* No Data





	Metadata
Scientific Name	Limanda ferruginea
Current Assess ID	DFO-SG-YELL4T-1960-2016-ASHBROOK
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf Region
Asmts in RAM	2016

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

		Time Series			
Туре	ID	Asmt Year	Curr Value	Sex	Age
ТВ	-	-	-	-	-
SSB	SSB-MT	2016	91,980	-	1-7+
TN	TN-E00	2016	351,648,350	-	5-Apr
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	0.002	-	4
TC	-	-	-		
TL	TL-MT	2016	95		
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

