

RecFin Data Overview

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How we pulled data

- Downloaded RecFin data on January 15, 2025 from recfin website

Filters applied for download:

- Agency = California
- Mode = All (Note, for some reason, there is NO Beach/Bank in 2023-2024)
- Water Area = Ocean (≤ 3 miles)
- Subregion = South California
- Trip Type = All

Thoughts

- Not sure why no beach/bank in 2023-2024
 - Beach bank catch estimates only based on online surveys, maybe these haven't been integrated yet?
 - ALDOS (Angler License Directory Online Survey) is used to collect effort data only for beach and bank fishing, night-time fishing, and private access fishing that might otherwise go unaccounted for.
- Should we include South district (San Diego, Orange, and LA Counties) and Channel district (Ventura and Santa Barbara Counties)? or just South?
 - Ideally, just LA County?
- Options for units are retained count, retained weight, released count, released weight, released dead count, released dead weight, total mortality count, total mortality weight
 - Likely, we're most interested in Total Mortality count and weight (and therefore that's what I include below)

Helpful resources and tips

- NOAA on CDFW-ALDOS
- RecFin data is a Catch Estimate
- 1979 - 2003 = Marine Recreational Statistical Survey (MRFSS)
- 2004 - Present = California Recreational Fisheries Survey (CRFS)
- 1936 - Present = Commercial Passenger Fishing Vessel (CPFV) operators are required to submit logbooks to CDFW that include documentation of each fishing trip
 - Each logbook entry reports effort (# anglers and # hours fished) and take (species and number fish caught)
 - CRFS uses CPFV effort data collected by samplers in the field and logbook records to estimate CPFV effort

Data processing steps

- 1) I load the data from RecFin website, and merge all CSVs into one.
- 2) I make some small data adjustments to improve usability.
- 3) Start by visualizing all RecFin data from 2004-2024

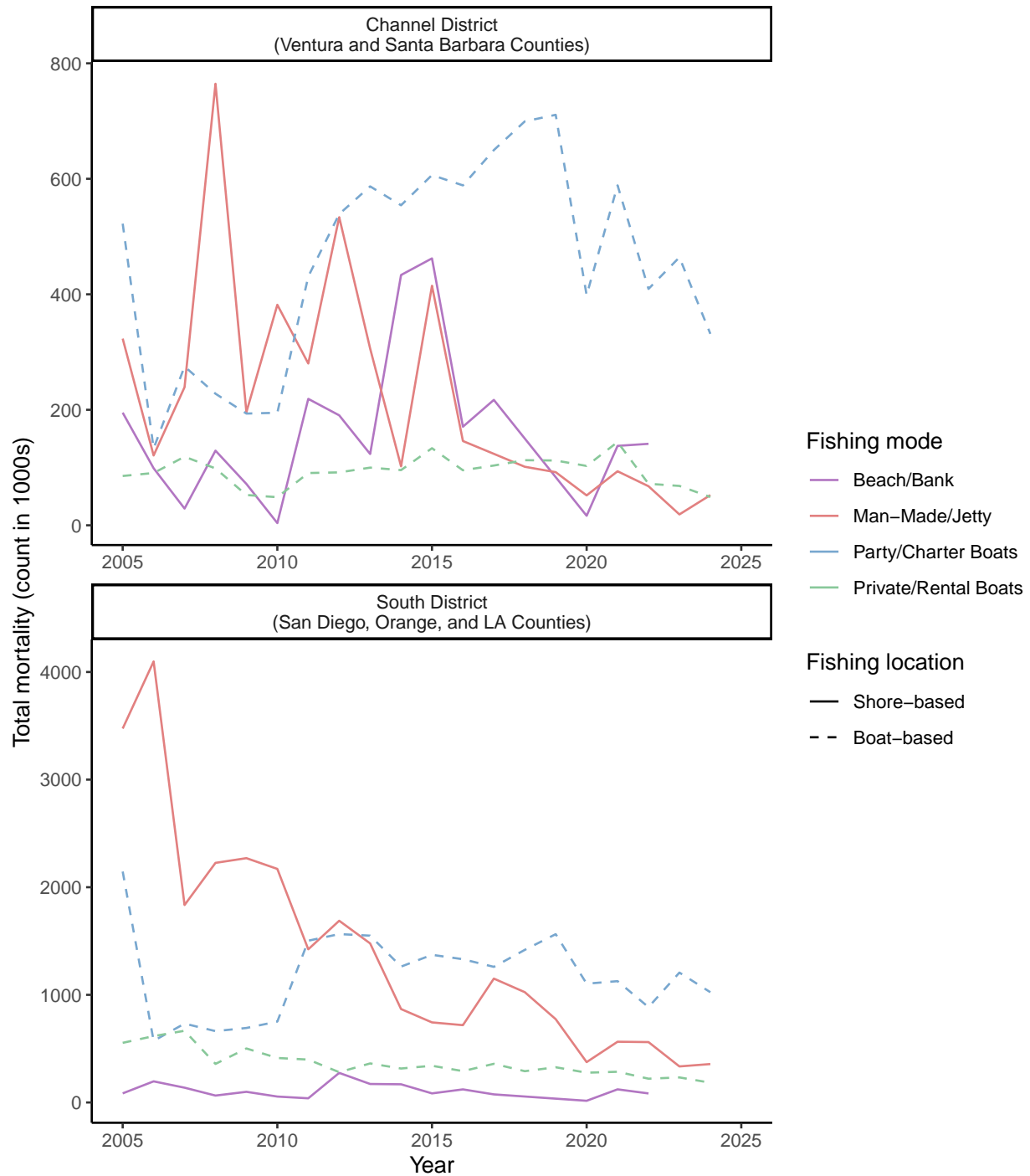


Figure 1: RecFin total estimated fishing mortality by count. Note different y-axis scale for each district. Color specifies fishing mode, line type specifies fishing mode location.

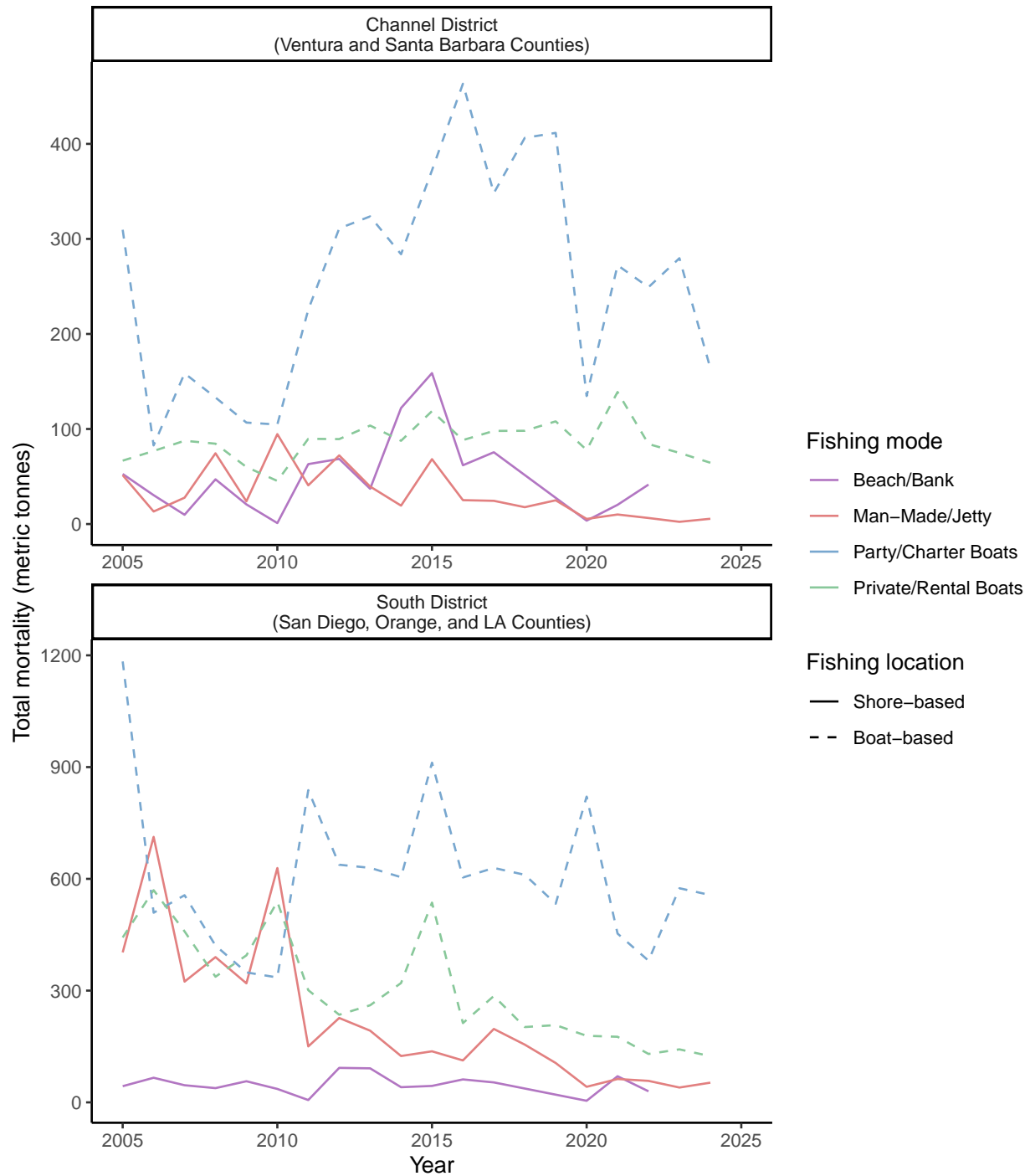


Figure 2: RecFin total estimated fishing mortality by weight. Note different y-axis scale for each district. Color specifies fishing mode, line type specifies fishing mode location.

4) Identify most common species

Table 1: Top species (by count) across both districts and all fishing modes.

Species	Total mortality 2004-2024 (count in 1000s)
Pacific (Chub) Mackerel	17337
Pacific Sardine	6114
California Scorpionfish	4088
Vermilion Rockfish	3411
Rockfish Genus	3388
Pacific Sanddab	3197
Ocean Whitefish	2795
Barred Surfperch	2758
Kelp Bass	2196
Bocaccio	2152

Table 2: Top species (by weight) across both districts and all fishing modes.

Species	Total mortality 2004-2024 (metric tonnes)
Yellowtail	3218
Pacific (Chub) Mackerel	2962
Vermilion Rockfish	2087
California Scorpionfish	1874
Pacific Bonito	1618
Barred Sandbass	1602
Kelp Bass	1564
Pacific Barracuda	1488
Bocaccio	1480
Ocean Whitefish	1241

5) Visualize time series of most common species in South District caught using shore-based methods (Beach/Pier/Jetty).

Table 3: Top species (by count) for all fishing modes in South District (LA, SD, OC Counties).

Species	Total mortality South District 2004-2024 (count in 1000s)
Pacific (Chub) Mackerel	15684
Pacific Sardine	4946
California Scorpionfish	3986
Pacific Sanddab	2657
Vermilion Rockfish	2189
Kelp Bass	1958
Barred Sandbass	1922
Rockfish Genus	1917
Northern Anchovy	1854
Ocean Whitefish	1567

Table 4: Top species (by weight) for all fishing modes in South District (LA, SD, OC Counties).

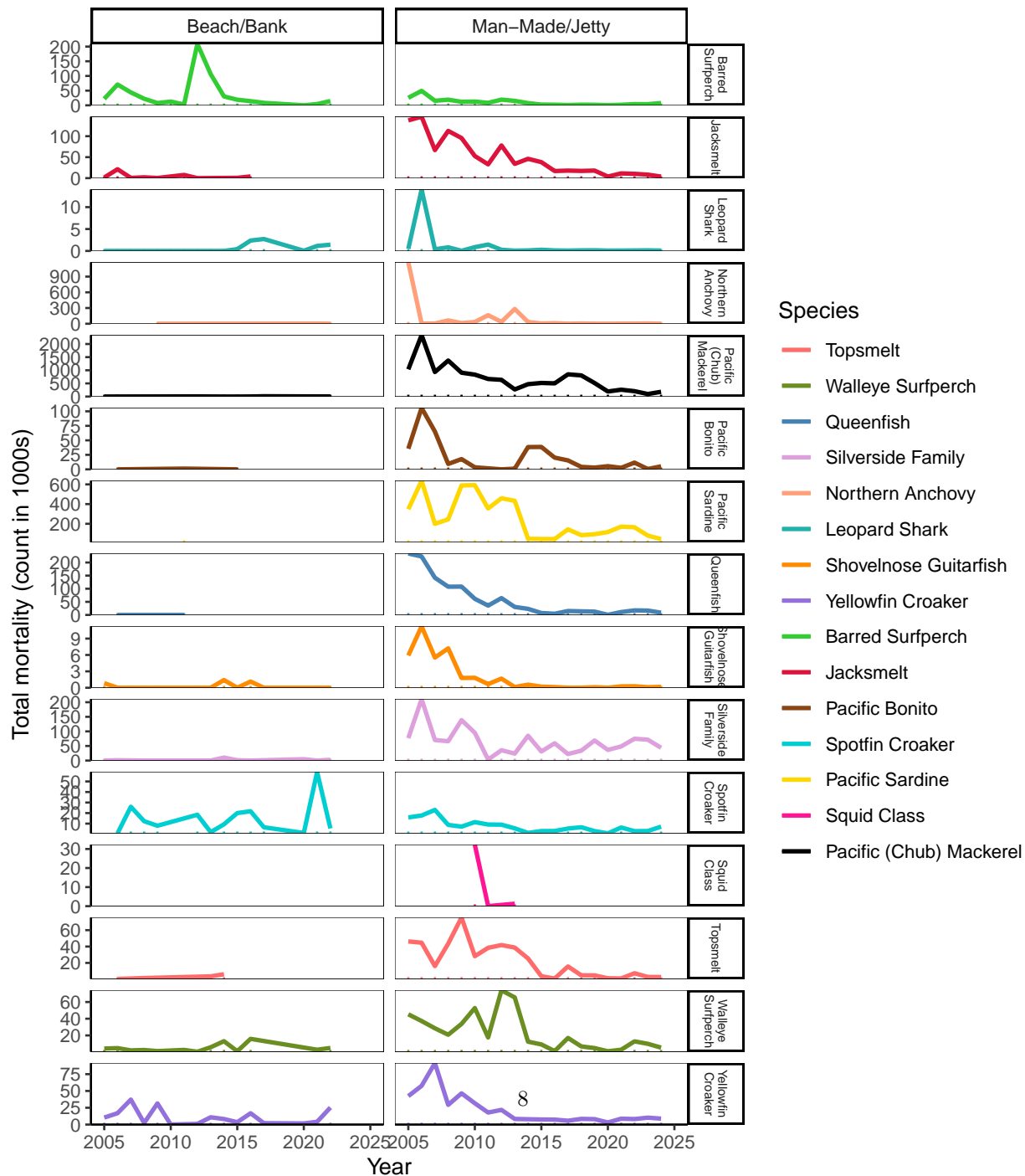
Species	Total mortality South District 2004-2024 (metric tonnes)
Yellowtail	2971
Pacific (Chub) Mackerel	2698
California Scorpionfish	1811
Pacific Bonito	1534
Barred Sandbass	1523
Kelp Bass	1375
Pacific Barracuda	1252
Vermilion Rockfish	1154
Squid Class	820
Bocaccio	815

Table 5: Top species (by count) for shore-based fishing modes in South District (LA, SD, OC Counties).

Species	Total shore-based mortality South District 2004-2024 (count in 1000s)
Pacific (Chub) Mackerel	13605
Pacific Sardine	4908
Northern Anchovy	1839
Silverside Family	1316
Queenfish	1137
Jacksmelt	986
Barred Surfperch	801
Yellowfin Croaker	604
Walleye Surfperch	522
Topsmelt	455

Table 6: Top species (by weight) for shore-based fishing modes in South District (LA, SD, OC Counties).

Species	Total shore-based mortality South District 2004-2024 (metric tonnes)
Pacific (Chub) Mackerel	2160
Squid Class	319
Pacific Sardine	292
Spotfin Croaker	253
Pacific Bonito	183
Jacksmelt	177
Barred Surfperch	171
Yellowfin Croaker	152
Shovelnose Guitarfish	142
Leopard Shark	138



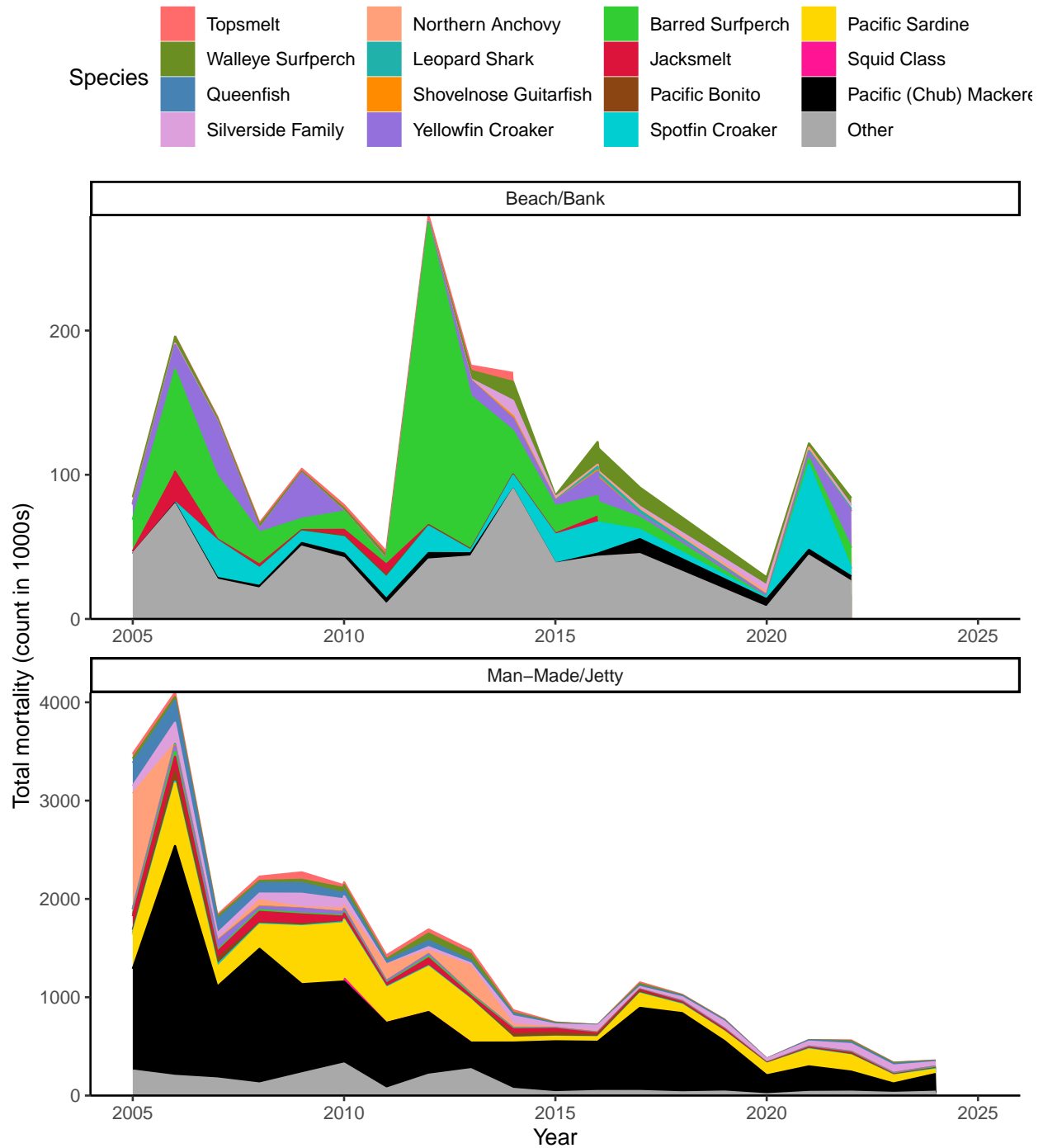


Figure 3: RecFin total estimated mortality count for shore-based fishing in the South District. All species not in the top ten by either count or weight are grouped as Other. Note different y-axis scale for mode. Color identifies species.

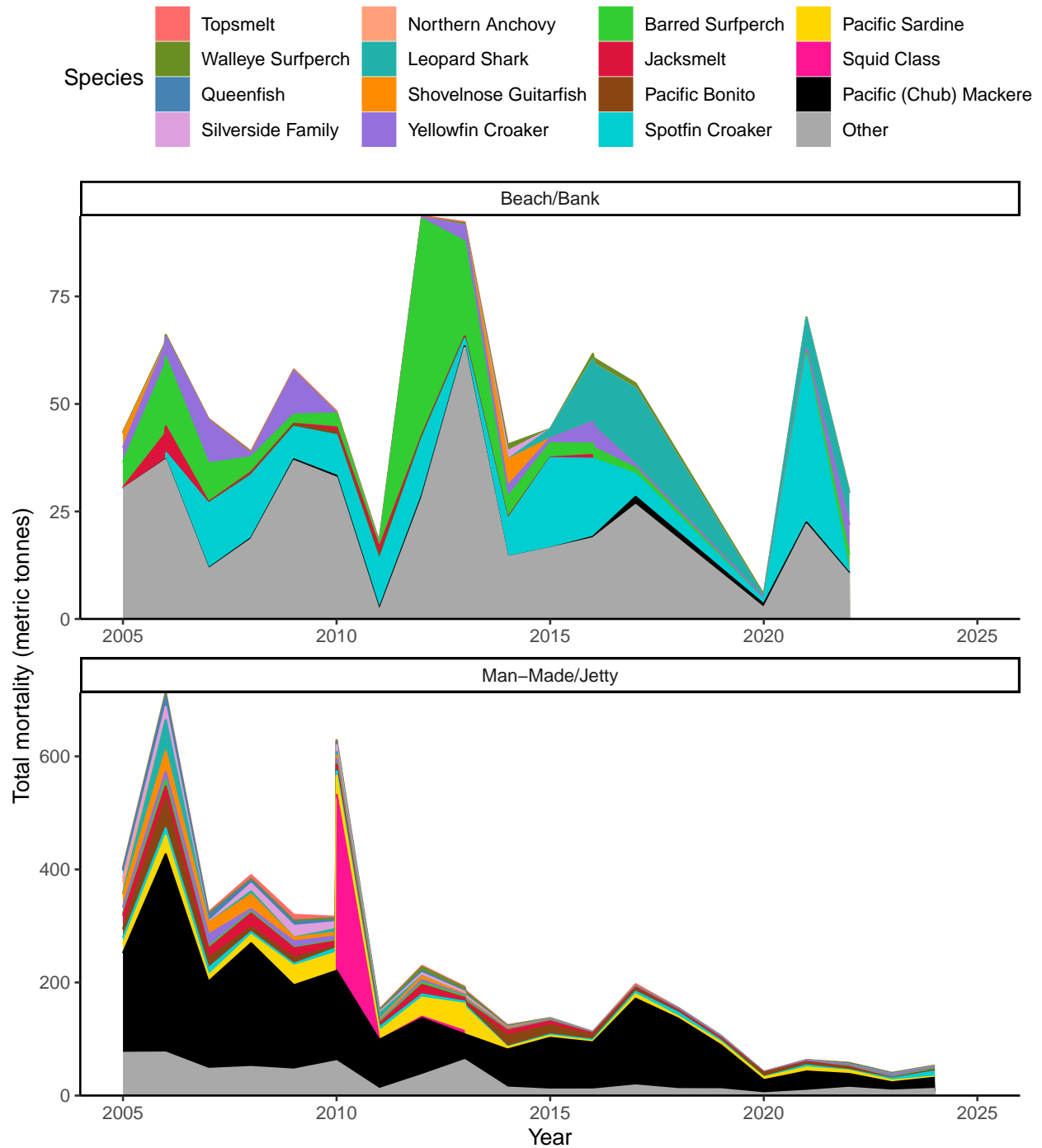
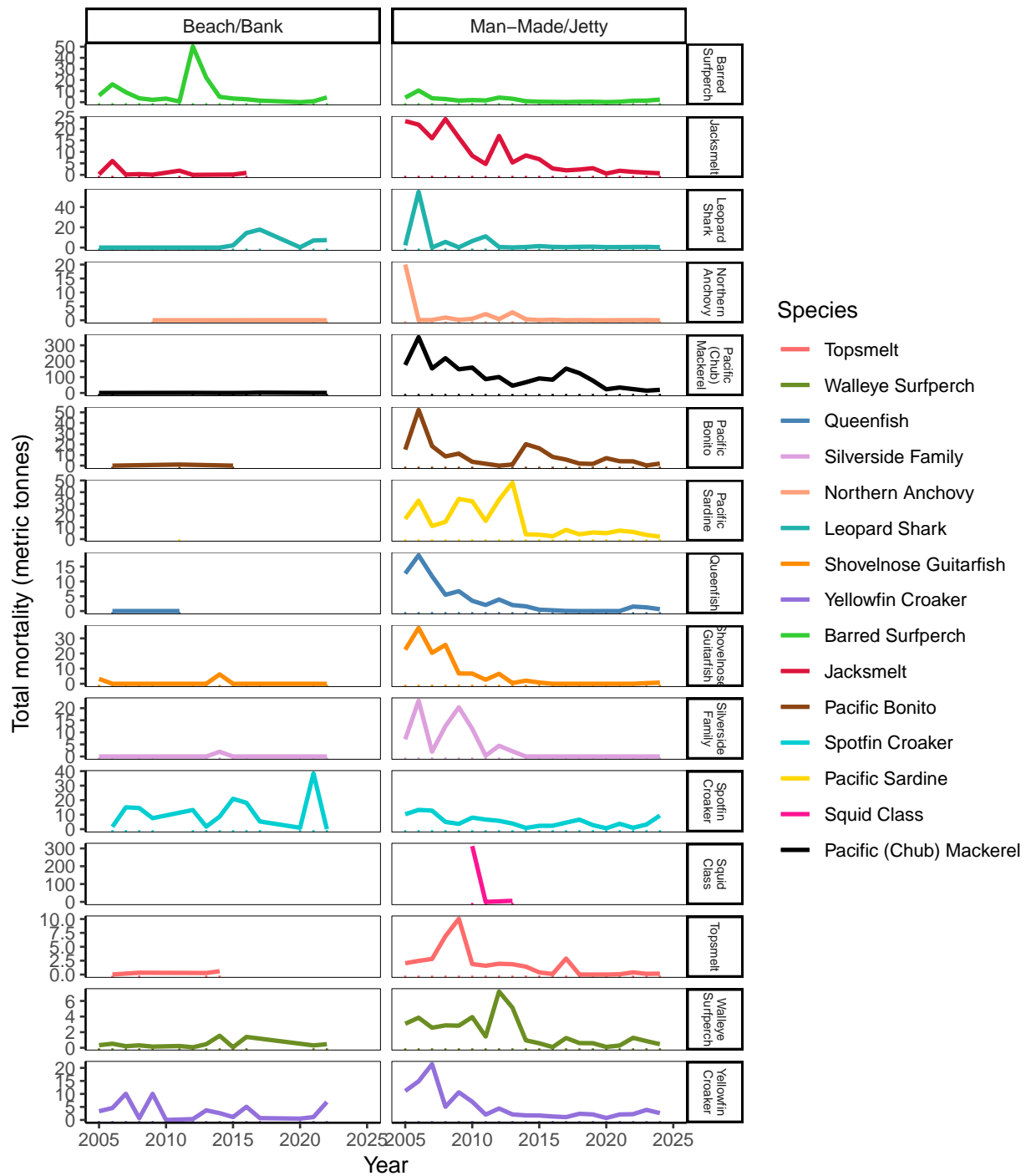


Figure 4: RecFin total estimated mortality weight for shore-based fishing in the South District. All species not in the top ten by either count or weight are grouped as Other. Note different y-axis scale for mode. Color identifies species.



I'm not immediately worried about changes in ID over time for any top species. It would be different if we were looking at rockfish, but no rockfish caught from shore.