

Southeast Reef Fish Survey (SERFS) 2021 Annual Report

SERFS is comprised of three groups that work together to sample reef fishes using traps and video between NC and FL:

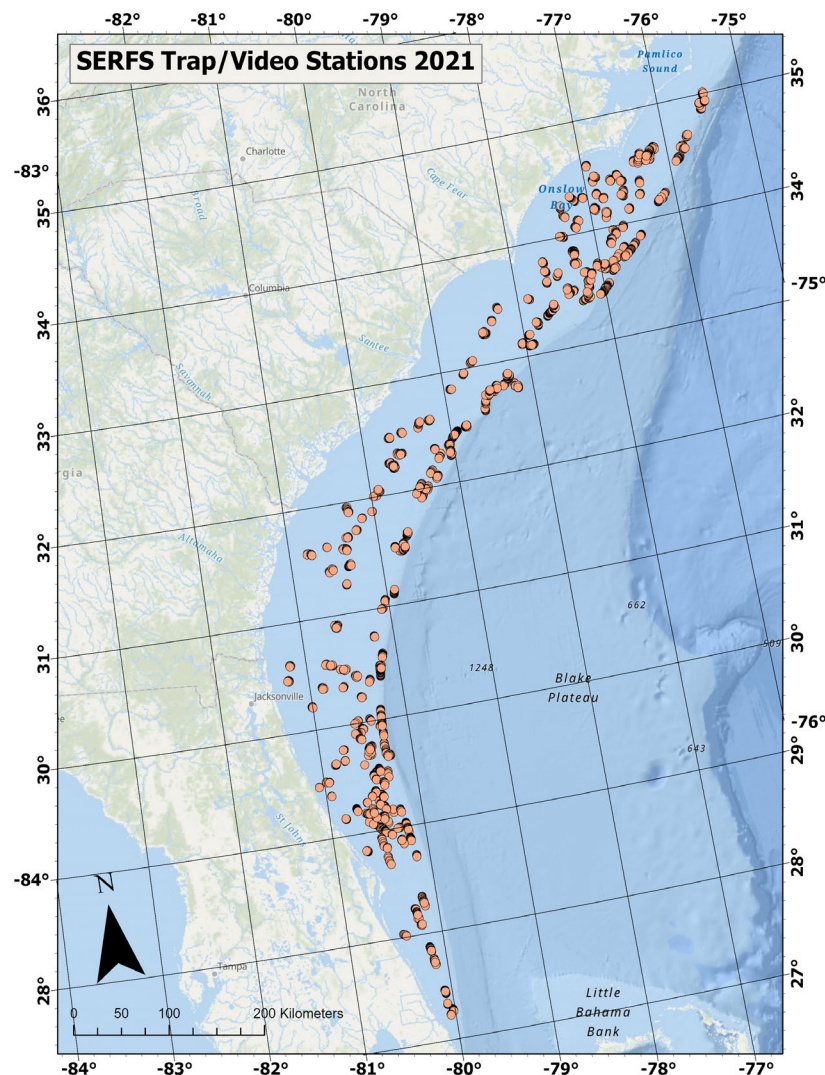
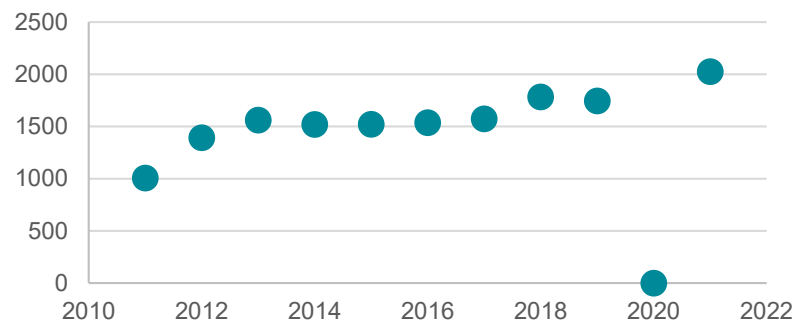
1. Southeast Fishery-Independent Survey (NMFS; Beaufort, NC)
2. Marine Resources Monitoring, Assessment, and Prediction program (SCDNR; Charleston, SC)
3. Southeast Area Monitoring and Assessment Program – South Atlantic (SCDNR; Charleston, SC)



2021 sampling by SERFS

- 2,025 traps deployed
 - 1,177 by SEFIS
 - 848 by MARMAP
- 14% more than any previous year (next highest: 1,784 traps were deployed in 2018)
- Reason: some sea days were carried over from 2020 when no regular monitoring occurred due to covid-19

of trap-video deployments



Most frequently caught species in 2021

(top 15 shown of 70 total taxa caught)

Taxa	SEFIS	MARMAP	Total
<i>Haemulon aurolineatum</i>	9066	9252	18318
<i>Centropristis striata</i>	2740	843	3583
<i>Rhomboplites aurorubens</i>	1661	1919	3580
<i>Lutjanus campechanus</i>	1507	462	1969
<i>Stenotomus sp.</i>	1463	371	1834
<i>Haemulon plumierii</i>	331	583	914
<i>Balistes capriscus</i>	516	374	890
<i>Pagrus pagrus</i>	232	620	852
<i>Diplectrum formosum</i>	347	219	566
<i>Diplodus holbrookii</i>	240	248	488
<i>Centropristis ocyurus</i>	290	139	429
<i>Calamus nodosus</i>	20	131	151
<i>Lagodon rhomboids</i>	99	10	109
<i>Equetus lanceolatus</i>	69	14	83
<i>Lutjanus vivanus</i>	11	57	68

Biological samples taken from fish in 2021

(only top 10 taxa shown)

	Ages	Gonads	DNA
<i>Lutjanus campechanus</i>	1968	255	1968
<i>Pagrus pagrus</i>	850	850	0
<i>Balistes capriscus</i>	691	0	0
<i>Centropristis striata</i>	676	0	0
<i>Rhomboplites aurorubens</i>	664	0	2
<i>Haemulon plumierii</i>	476	0	0
<i>Calamus nodosus</i>	131	99	0
<i>Lutjanus vivanus</i>	68	56	0
<i>Mycteroperca microlepis</i>	26	3	0
<i>Mycteroperca phenax</i>	23	14	14

Indices of abundance

- Trap-based
 - SCDNR will continue to develop annual updates
- Video-based
 - Development of updated annual indices is underway for species that have undergone a SEDAR assessment that have utilized a SERFS-based video index
 - Species-specific indices will be completed by spring of 2022
 - Updated annually; completed early in subsequent calendar years
 - We are exploring options for developing updated video-based annual indices for a broader range of species in subsequent years.