

Appendix 2. Target species in all 17 states analyzed along the Brazilian coastline with their vulnerability variables.

Table A2.1: Target species in all 17 states analyzed along the Brazilian coastline with their vulnerability variables. Information is described for each species of the 10 main fish targets in weight by artisanal and industrial sectors. FP = fishing pressure, SS = stock status, ThoL = trophic level, RES = resilience, VUL = vulnerability, TheL = Threat level, PC = price category, DR = distribution range, art = artisanal, ind = industrial, mod = moderate, vul = vulnerable, lc = least concern, nt = near threatened, not = not threat, dd = data deficient.

STATES	SPECIES	FP	SS	ThoL	RES	VUL	TheL	PC	DR
AP	Sciades parkeri	ind/art	overexploited	4.1	High	high	vul	medium	Western_Atlantic
AP	Cynoscion acoupa	ind/art	exploited	4.1	medium	high	lc	medium	Western_Atlantic
AP	Sciades couma	ind/art	exploited	3.9	medium	mod	lc	medium	South_America
AP	Coryphaena hippurus	art	exploited	4.4	High	mod	lc	high	Atlantic_Indian_Pacific
AP	Micropogonias furnieri	art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
AP	Sciades proops	art	exploited	4.4	High	mod	na	medium	WesternAtlantic
AP	Cynoscion virescens	art	overexploited	4	Low	high	lc	medium	WesternAtlantic
AP	Megalops atlanticus	art	rebuilding	4.5	Low	very high	vul	medium	Atlantic_Pacific
AP	Bagre bagre	art	exploited	4	Low	high	lc	medium	South_America
AP	Lutjanus purpureus	ind/art	overexploited	3.6	Low	high	vul	high	WesternAtlantic
PA	Cynoscion acoupa	ind/art	exploited	4.1	medium	high	lc	medium	Western_Atlantic
PA	Sciades parkeri	art	overexploited	4.1	High	high	vul	medium	Western_Atlantic
PA	Scomberomorus brasiliensis	art	exploited	3.3	medium	very high	lc	high	Western_Atlantic
PA	Lutjanus purpureus	ind/art	overexploited	3.6	Low	high	vul	high	WesternAtlantic
PA	Sciades proops	art	exploited	4.4	High	mod	na	medium	WesternAtlantic
PA	Cynoscion microlepidotus	art	exploited	4	Low	high	lc	medium	WesternAtlantic
PA	Sciades herzbergii	art	overexploited	3.3	medium	mod	lc	medium	South_America
PA	Macrodon ancylodon	ind/art	exploited	3.9	medium	mod	lc	medium	WesternAtlantic
PA	Coryphaena hippurus	art	exploited	4.4	High	mod	lc	high	Atlantic_Indian_Pacific
PA	Sciades couma	ind	exploited	3.9	medium	mod	lc	medium	South_America
MA	Cynoscion acoupa	art	exploited	4.1	medium	high	lc	medium	Western_Atlantic
MA	Macrodon ancylodon	art	exploited	3.9	medium	mod	lc	medium	WesternAtlantic
MA	Hexanematichthys herzbergii	art	overexploited	3.3	medium	mod	lc	medium	South_America

MA	<i>Scomberomorus brasiliensis</i>	art	exploited	3.3	medium	very high	lc	high	Western_Atlantic
MA	<i>Aspistor quadriscutis</i>	art	exploited	3.5	medium	mod	lc	medium	South_America
MA	<i>Micropogonias furnieri</i>	art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
MA	<i>Sciades proops</i>	art	exploited	4.4	High	mod	na	medium	WesternAtlantic
MA	<i>Bagre bagre</i>	art	exploited	4	Low	high	lc	medium	South_America
MA	<i>Cynoscion leiarchus</i>	art	overexploited	3.1	medium	mod	lc	medium	WesternAtlantic
MA	<i>Genyatremus luteus</i>	art	overexploited	3.5	medium	mod	dd	medium	WesternAtlantic
PI	<i>Lutjanus synagris</i>	art	exploited	3.8	medium	mod	nt	medium	WesternAtlantic
PI	<i>Scomberomorus brasiliensis</i>	art	exploited	3.3	medium	very high	lc	high	Western_Atlantic
PI	<i>Scomberomorus cavalla</i>	art	exploited	4.4	Low	high	lc	medium	WesternAtlantic_EasternCentral Atlantic
PI	<i>Euthynnus alletteratus</i>	art	exploited	4.5	medium	high	lc	medium	Atlantic
PI	<i>Ocyurus chrysurus</i>	art	exploited	4	Low	high	dd	medium	WesternAtlantic_EasternCentral Atlantic
PI	<i>Lutjanus purpureus</i>	art	overexploited	3.6	Low	high	vul	high	WesternAtlantic
PI	<i>Micropogonias furnieri</i>	art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
PI	<i>Conodon nobilis</i>	art	overexploited	3.6	medium	mod	lc	low	WesternAtlantic_WesternGulfof Mexico
PI	<i>Chloroscombrus chrysurus</i>	art	exploited	3.5	medium	mod	lc	low	WesternAtlantic_EasternAtlantic
PI	<i>Lycengraulis grossidens</i>	art	exploited	3.7	medium	mod	lc	medium	WesternAtlantic
CE	<i>Ocyurus chrysurus</i>	art	exploited	4	Low	high	dd	medium	WesternAtlantic_EasternCentral Atlantic
CE	<i>Opisthonema oglinum</i>	art	exploited	4.5	medium	low	lc	medium	WesternAtlantic
CE	<i>Scomberomorus cavalla</i>	ind/art	exploited	4.4	Low	high	lc	medium	WesternAtlantic_EasternCentral Atlantic
CE	<i>Lutjanus synagris</i>	art	exploited	3.8	medium	mod	nt	medium	WesternAtlantic
CE	<i>Scomberomorus brasiliensis</i>	art	exploited	3.3	medium	very high	lc	high	Western_Atlantic
CE	<i>Haemulon plumierii</i>	art	exploited	3.8	medium	high	lc	medium	Western_Atlantic

CE	<i>Chloroscombrus chrysurus</i>	art	exploited	3.5	medium	mod	lc	low	WesternAtlantic_EasternAtlantic
CE	<i>Carangoides bartholomaei</i>	art	exploited	4.5	High	high	lc	medium	Western_EasternCentral_Atlantic
CE	<i>Mycteroperca bonaci</i>	art	overexploited	4.3	Low	high	vul	very high	Western_Atlantic
CE	<i>Lutjanus purpureus</i>	ind/art	overexploited	3.6	Low	high	vul	high	WesternAtlantic
RN	<i>Xiphias gladius</i>	ind	exploited	4.5	medium	very high	lc	very high	Atlantic_Indian_Pacific
RN	<i>Thunnus albacares</i>	ind/art	exploited	4.4	medium	high	nt	high	Worldwide
RN	<i>Opisthonema oglinum</i>	art	exploited	4.5	medium	low	lc	medium	WesternAtlantic
RN	<i>Hirundichthys affinis</i>	art	overexploited	3.8	High	low	lc	medium	Eastern_Western_NorthwestAtlantic
RN	<i>Thunnus obesus</i>	ind	overexploited	4.5	medium	high	vul	very high	Atlantic_Indian_Pacific
RN	<i>Scomberomorus brasiliensis</i>	art	exploited	3.3	medium	very high	lc	high	Western_Atlantic
RN	<i>Prionace glauca</i>	ind	exploited	4.4	very low	very high	nt	medium	Circumglobal_Atlantic_Pacific
RN	<i>Xyrichtys novacula</i>	art	overexploited	3.5	medium	mod	lc	very high	Western_Eastern_Atlantic
RN	<i>Haemulon plumierii</i>	art	exploited	3.8	medium	high	lc	medium	Western_Atlantic
RN	<i>Ocyurus chrysurus</i>	art	exploited	4	Low	high	dd	medium	WesternAtlantic_EasternCentralAtlantic
PB	<i>Thunnus albacares</i>	ind	exploited	4.4	medium	high	nt	high	Worldwide
PB	<i>Thunnus obesus</i>	ind	overexploited	4.5	medium	high	vul	very high	Atlantic_Indian_Pacific
PB	<i>Xiphias gladius</i>	ind	exploited	4.5	medium	very high	lc	very high	Atlantic_Indian_Pacific
PB	<i>Thunnus alalunga</i>	ind	overexploited	4.3	medium	high	nt	high	Cosmopolitan_tropical_temperature
PB	<i>Prionace glauca</i>	ind	exploited	4.4	very low	very high	nt	medium	Circumglobal_Atlantic_Pacific
PB	<i>Mugil curema</i>	art	collapsed	2	medium	high	lc	medium	Western_EasternAtlantic_EasternPacific

PB	<i>Istiophorus platypterus</i>	ind	overexploited	4.5	Low	very high	lc	very high	Worldwide_IndoPacific_Eastern Pacific_Indian
PB	<i>Centropomus undecimalis</i>	art	exploited	4.2	medium	high	lc	Low	Western_Atlantic
PB	<i>Trachinotus falcatus</i>	art	overexploited	4	medium	mod	lc	medium	Western_Atlantic
PB	<i>Scomberomorus brasiliensis</i>	art	exploited	3.3	medium	very high	lc	High	Western_Atlantic
PE	<i>Anchovia clupeioides</i>	art	exploited	3.4	High	mod	lc	medium	Western_Atlantic
PE	<i>Thunnus albacares</i>	ind	exploited	4.4	medium	high	nt	High	Worldwide
PE	<i>Pseudupeneus maculatus</i>	art	exploited	3.7	High	mod	lc	medium	Western_Atlantic
PE	<i>Mugil curema</i>	art	collapsed	2	medium	high	lc	medium	Western_EasternAtlantic_Easter nPacific
PE	<i>Opisthonema oglinum</i>	art	exploited	4.5	medium	low	lc	medium	WesternAtlantic
PE	<i>Haemulon aurolineatum</i>	art	rebuilding	4.4	medium	mod	lc	medium	Western_Atlantic
PE	<i>Conodon nobilis</i>	art	overexploited	3.6	medium	mod	lc	low	WesternAtlantic_WesternGulfof Mexico
PE	<i>Sparisoma spp_axillare</i>	art	exploited	2	medium	mod	vul	na	Southwest_Atlantic_endemic
PE	<i>Lutjanus analis</i>	art	exploited	3.9	Low	high	nt	high	Western_Atlantic
PE	<i>Acanthocybium solandri</i>	ind	rebuilding	4.3	medium	high	lc	very high	Atlantic_Indian_Pacific
AL	<i>Mugil curvidens</i>	art	exploited	2	medium	mod	nt	na	Western_Atlantic
AL	<i>Opisthonema oglinum</i>	art	exploited	4.5	medium	low	lc	medium	WesternAtlantic
AL	<i>Macrodon ancylodon</i>	art	exploited	3.9	medium	mod	lc	medium	WesternAtlantic
AL	<i>Caranx hippos</i>	art	exploited	3.6	medium	mod	lc	medium	Western_Eastern_Atlantic
AL	<i>Diapterus auratus</i>	art	exploited	2.4	High	mod	lc	medium	Western_Atlantic
AL	<i>Scomberomorus brasiliensis</i>	art	exploited	3.3	medium	very high	lc	high	Western_Atlantic
AL	<i>Balistes vetula</i>	art	rebuilding	3.8	medium	mod	nt	medium	Western_Eastern_Atlantic
AL	<i>Scomberomorus cavalla</i>	art	exploited	4.4	Low	high	lc	medium	WesternAtlantic_EasternCentral Atlantic

AL	Mugil liza	art	rebuilding	2	medium	mod	dd	high	Western_Atlantic
AL	Sciades herzbergii	art	overexploited	3.3	medium	mod	lc	medium	South_America
SE	Mugil curema	art	collapsed	2	medium	high	lc	medium	Western_EasternAtlantic_Easter nPacific
SE	Macrodon ancylodon	art	exploited	3.9	medium	mod	lc	medium	WesternAtlantic
SE	Sciades herzbergii	art	overexploited	3.3	medium	mod	lc	medium	South_America
SE	Anchoviella vaillanti	art	overexploited	3.2	High	low	nt	na	South_America
SE	Caranx hippos	art	exploited	3.6	medium	mod	lc	medium	Western_Eastern_Atlantic
SE	Micropogonias furnieri	art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
SE	Diapterus rhombeus	art	overexploited	3	High	low	lc	medium	Western_Atlantic
SE	Cathorops spixii	art	overexploited	3.5	medium	high	na	medium	Western_Atlantic
SE	Scomberomorus cavalla	art	exploited	4.4	Low	high	lc	medium	WesternAtlantic_EasternCentral Atlantic
SE	Conodon nobilis	art	overexploited	3.6	medium	mod	lc	low	WesternAtlantic_WesternGulfof Mexico
BA	Sardinella brasiliensis	art	rebuilding	3.1	High	low	na	medium	Western_Atlantic
BA	Ocyurus chrysurus	art	exploited	4	Low	high	dd	medium	WesternAtlantic_EasternCentral Atlantic
BA	Opisthonema oglinum	art	exploited	4.5	medium	low	lc	medium	WesternAtlantic
BA	Diapterus rhombeus	art	overexploited	3	High	low	lc	medium	Western_Atlantic
BA	Cetengraulis edentulus	art	rebuilding	2.1	medium	mod	lc	medium	Western_Atlantic
BA	Lutjanus jocu	art	exploited	4.4	Low	very high	dd	high	Western_Eastern_Atlantic
BA	Coryphaena hippurus	art	exploited	4.4	High	mod	lc	high	Atlantic_Indian_Pacific
BA	Mycteroperca spp_bonaci	art	overexploited	4.3	Low	high	vul	very high	Western_Atlantic
BA	Caranx crysos	art	exploited	4.1	medium	mod	lc	low	Western_Eastern_Atlantic

BA	<i>Pomacanthus paru</i>	ind	exploited	2.8	medium	mod	lc	high	Western_Eastern_Atlantic
ES	<i>Coryphaena hippurus</i>	art	exploited	4.4	High	mod	lc	high	Atlantic_Indian_Pacific
ES	<i>Balistes capriscus</i>	art	overexploited	4.1	medium	high	vul	high	Western_Eastern_Atlantic
ES	<i>Thunnus albacares</i>	ind/art	exploited	4.4	medium	high	nt	high	Worldwide
ES	<i>Ocyurus chrysurus</i>	art	exploited	4	Low	high	dd	medium	WesternAtlantic_EasternCentral Atlantic
ES	<i>Trachurus lathami</i>	ind	rebuilding	4	medium	mod	lc	low	Western_Atlantic
ES	<i>Pagrus pagrus</i>	art	rebuilding	3.9	medium	very high	lc	very high	Western_Eastern_Atlantic
ES	<i>Caranx crysos</i>	ind	exploited	4.1	medium	mod	lc	low	Western_Eastern_Atlantic
ES	<i>Katsuwonus pelamis</i>	ind	exploited	4.4	medium	mod	lc	high	Cosmopolitan_tropical_warmte mperate
ES	<i>Lutjanus purpureus</i>	art	overexploited	3.6	Low	high	vul	high	WesternAtlantic
ES	<i>Coryphaena hippurus</i>	ind	exploited	4.4	High	mod	lc	high	Atlantic_Indian_Pacific
RJ	<i>Sardinella brasiliensis</i>	ind/art	rebuilding	3.1	High	low	na	medium	Western_Atlantic
RJ	<i>Cetengraulis edentulus</i>	ind	rebuilding	2.1	medium	mod	lc	medium	Western_Atlantic
RJ	<i>Katsuwonus pelamis</i>	art	exploited	4.4	medium	mod	lc	high	Cosmopolitan_tropical_warmte mperate
RJ	<i>Stephanolepis hispidus</i>	art	collapsed	2.6	High	mod	lc	na	Western_Eastern_Atlantic
RJ	<i>Scomber colias</i>	ind/art	collapsed	3.9	medium	mod	lc	na	Atlantic
RJ	<i>Micropogonias furnieri</i>	ind	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
RJ	<i>Caranx latus</i>	ind	exploited	4.2	medium	high	lc	high	Western_Eastern_Atlantic
RJ	<i>Thunnus albacares</i>	ind	exploited	4.4	medium	high	nt	high	Worldwide
RJ	<i>Opisthonema oglinum</i>	ind	exploited	4.5	medium	low	lc	medium	WesternAtlantic

RJ	<i>Lophius gastrophysus</i>	ind	overexploited	4.5	medium	high	lc	low	WesternAtlantic
SP	<i>Sardinella brasiliensis</i>	ind/art	rebuilding	3.1	High	low	na	medium	Western_Atlantic
SP	<i>Micropogonias furnieri</i>	ind/art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
SP	<i>Cynoscion jamaicensis</i>	ind	overexploited	3.8	High	low	lc	medium	Western_Atlantic
SP	<i>Anchoviella lepidentostole</i>	art	exploited	3.1	High	low	lc	medium	Western_Atlantic
SP	<i>Macrodon atricauda</i>	ind/art	overexploited	4	High	low	na	na	Southwest_Atlantic
SP	<i>Scomber colias</i>	ind	collapsed	3.9	medium	mod	lc	na	Atlantic
SP	<i>Lophius gastrophysus</i>	ind	overexploited	4.5	medium	high	lc	low	WesternAtlantic
SP	<i>Xiphias gladius</i>	ind	exploited	4.5	medium	very high	lc	very high	Atlantic_Indian_Pacific
SP	<i>Mugil liza</i>	ind/art	rebuilding	2	medium	mod	dd	High	Western_Atlantic
SP	<i>Coryphaena hippurus</i>	art	exploited	4.4	High	mod	lc	High	Atlantic_Indian_Pacific
PR	<i>Sardinella brasiliensis</i>	art	rebuilding	3.1	High	low	na	medium	Western_Atlantic
PR	<i>Harengula clupeiola</i>	art	overexploited	3.3	High	low	lc	low	Western_Atlantic
PR	<i>Chloroscombrus chrysurus</i>	art	exploited	3.5	medium	mod	lc	low	WesternAtlantic_EasternAtlantic
PR	<i>Micropogonias furnieri</i>	art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
PR	<i>Opisthonema oglinum</i>	art	exploited	4.5	medium	low	lc	medium	WesternAtlantic
PR	<i>Cynoscion virescens</i>	art	overexploited	4	Low	high	lc	medium	WesternAtlantic
PR	<i>Oligoplites saurus_saliens</i>	art	collapsed/rebuilding	4.05	High	mod	lc	medium	WesternAtlantic_EasternPacific _WesternAtlantic
PR	<i>Pogonias cromis</i>	art	collapsed	3.9	medium	high	vul	low	WesternAtlantic
PR	<i>Macrodon atricauda</i>	art	overexploited	4	High	low	na	na	Southwest_Atlantic
PR	<i>Mugil liza</i>	art	rebuilding	2	medium	mod	dd	high	Western_Atlantic
SC	<i>Sardinella brasiliensis</i>	ind/art	rebuilding	3.1	High	low	na	medium	Western_Atlantic
SC	<i>Katsuwonus pelamis</i>	ind	exploited	4.4	medium	mod	lc	high	Cosmopolitan_tropical_warmtemperate
SC	<i>Micropogonias furnieri</i>	ind/art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
SC	<i>Opisthonema oglinum</i>	ind	exploited	4.5	medium	low	lc	medium	WesternAtlantic

SC	Umbrina canosai	ind	exploited	3.9	medium	mod	na	low	Southwest_Atlantic
SC	Prionotus punctatus	ind	exploited	3.8	Low	high	lc	medium	WesternAtlantic
SC	Urophycis mystacea	ind	exploited	4	Low	high	na	na	Southwest_Atlantic
SC	Cynoscion guatucupa	ind	exploited	3.7	medium	mod	na	na	Southwest_Atlantic
SC	Chloroscombrus chrysurus	ind	exploited	3.5	medium	mod	lc	low	WesternAtlantic_EasternAtlantic
SC	Mugil liza	ind/art	rebuilding	2	medium	mod	dd	high	Western_Atlantic
RS	Micropogonias furnieri	ind/art	exploited	3.1	medium	mod	lc	medium	Western_Atlantic
RS	Umbrina canosai	ind/art	exploited	3.9	medium	mod	na	low	Southwest_Atlantic
RS	Cynoscion guatucupa	ind/art	exploited	3.7	medium	mod	na	na	Southwest_Atlantic
RS	Katsuwonus pelamis	ind	exploited	4.4	medium	mod	lc	high	Cosmopolitan_tropical_warmtemperate
RS	Macrodon atricauda	ind	overexploited	4	High	low	na	na	Southwest_Atlantic
RS	Prionotus punctatus	art	exploited	3.8	Low	high	lc	medium	WesternAtlantic
RS	Pomatomus saltatrix	ind	collapsed	4.5	medium	high	vul	very high	Circumglobal_Atlantic_Indian_Pacific
RS	Mugil liza	ind/art	rebuilding	2	medium	mod	dd	high	Western_Atlantic
RS	Urophycis brasiliensis	ind	exploited	3.8	medium	mod	na	low	Southwest_Atlantic
RS	Thunnus albacares	ind	exploited	4.4	medium	high	nt	high	Worldwide