

Appendix 9

The ranking of Queensland line-caught species with respect to criteria that reflect their susceptibility to high post release mortality by line fishing operations  
(Note: Species in bold occur in the Gulf of Carpentaria Line Fishery)

Species / Group	Factors affecting the number of line-caught fish released						Factors affecting the post-release survival of line-caught fish								Factors affecting the capacity of line-caught fish to survive anthropogenic impacts								Total	Survey participation	
	Eating	Sport	Minimum Size limit	Maximum size limit	Baglimit	Bycatch	Barotrauma	Handling	Play length	Temperature	Salinity	Grading	Predation	Hook damage	Longevity	Growth	Exploitation rate	Reproductive potential	Fecundity	Length of spawning season	Vulnerability of spawning aggregations	Distribution pattern			Need for research
<b>Nannygai</b> ( <i>Lutjanus malabaricus</i> and <i>Lutjanus erythropterus</i> )	2.5	1.5	2.7	1.0	2.5	2.3	3.0	2.0	1.7	1.3	1.0	1.7	3.0	2.3	2.5	2.5	2.5	2.0	1.5	2.5	3.0	2.0	2.0	<b>49.0</b>	3
<b>Jobfish</b> ( <i>Aprion virescens</i> , <i>Pristipomoides filamentosus</i> , <i>P.sieboldi</i> , <i>P.multidens</i> , <i>P.typus</i> , <i>Aphareus vutilans</i> )	3.0	1.0	2.0	1.0	1.0	3.0	3.0	2.0	2.0	2.0	1.0	1.0	2.0	2.0	3.0	2.0	3.0	3.0	1.0	3.0	2.0	2.0	3.0	<b>48.0</b>	1
Mulloway ( <i>Argyrosomus. hololepidotus</i> ) & <b>Northern mullo</b> ( <i>Protonibea diacanthus</i> )	2.8	2.4	2.2	1.8	2.0	1.8	2.8	2.6	2.4	1.4	1.0	1.0	1.6	1.6	2.5	1.5	2.5	2.0	1.0	2.5	3.0	1.5	2.5	<b>46.4</b>	5
<b>Pearl Perch</b> ( <i>Glaucosoma scapulare</i> )	3.0	1.3	2.1	1.0	1.7	2.9	2.9	1.9	1.1	1.6	1.0	1.4	2.3	2.0	2.0	2.3	2.8	1.2	2.0	3.0	2.0	2.8	2.2	<b>46.3</b>	7
Morwong ,blue ( <i>Nemadactylus valenciennesi</i> )	2.0	1.0	3.0	1.0	2.0	2.0	3.0	2.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	2.0	1.0	2.0	3.0	3.0	3.0	2.0	3.0	<b>46.0</b>	1
<b>Snappers, Seaperches, Hussar</b> ( <i>Lutjanus spp</i> )	3.0	1.8	2.3	1.0	1.1	2.4	2.7	2.0	1.1	1.6	1.0	1.0	2.4	2.4	2.4	2.4	2.5	1.9	2.3	2.2	2.3	2.0	2.1	<b>46.0</b>	9
<b>Cods</b> (Serranidae family)	2.5	1.3	1.9	1.7	1.3	2.7	2.5	1.9	1.4	1.3	1.0	1.4	1.9	1.9	3.0	2.0	2.7	2.0	1.3	2.7	2.3	1.8	2.5	<b>44.7</b>	9
<b>Barramundi</b> ( <i>Lates calcarifer</i> )	3.0	2.9	2.5	1.8	2.0	1.9	1.2	2.6	2.0	1.4	1.0	1.6	1.6	1.9	2.1	1.4	2.9	2.0	1.0	2.9	1.6	1.9	1.7	<b>44.7</b>	11
<b>Snapper</b> ( <i>Pagrus auratus</i> ),	3.0	1.4	2.2	1.0	1.8	2.8	2.6	2.0	1.2	1.4	1.0	1.4	2.4	2.0	2.5	2.3	3.0	1.4	1.5	3.0	2.4	1.0	1.4	<b>44.7</b>	5
<b>Samson fish</b> ( <i>Seriola hippos</i> )	2.5	2.0	2.5	1.0	1.5	2.5	2.0	2.5	2.0	1.5	1.0	1.0	2.0	2.0	3.0	1.5	2.0	2.5	1.0	2.5	2.0	1.5	2.5	<b>44.5</b>	2
<b>Sharks</b> (all species except whale sharks)	1.3	2.7	1.5	1.0	1.7	2.5	1.0	2.0	2.3	1.5	1.0	1.0	1.0	1.5	3.0	3.0	2.0	3.0	2.5	2.5	1.5	2.0	3.0	<b>44.4</b>	4
<b>Mackerels, Spanish</b> ( <i>S.commerson</i> ), Spotted and Qld school ( <i>Scomberomorus spp</i> ) -	3.0	2.6	2.1	1.0	1.7	1.6	1.2	2.7	2.3	1.1	1.0	1.1	1.9	2.3	1.8	1.0	3.0	1.5	1.5	3.0	2.7	2.0	2.3	<b>44.3</b>	9
<b>Fingermark bream/Moses Perch</b> ( <i>Lutjanus russelli</i> )	2.8	1.9	2.2	1.3	1.3	2.1	1.8	2.1	1.6	1.3	1.0	1.1	1.6	2.1	2.3	2.3	3.1	1.7	1.7	2.7	2.3	1.7	2.3	<b>44.2</b>	9
<b>Wahoo</b> ( <i>Acanthocybium solandri</i> )	1.0	3.0	2.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	1.0	1.0	1.0	3.0	2.0	1.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	<b>44.0</b>	1
<b>Trevallies</b> ( <i>Caranx &amp; Carangoides spp</i> )	2.0	2.4	1.2	1.0	1.6	2.6	1.4	2.0	2.2	1.4	1.0	1.2	1.8	1.8	2.5	2.0	2.0	3.0	1.5	2.5	2.0	1.5	3.0	<b>43.6</b>	5
<b>Gropers &amp; tuskfish</b> ( <i>Choerodon spp</i> ) -	2.8	1.0	1.6	1.4	1.6	2.6	2.4	2.4	1.2	1.6	1.0	1.2	2.2	2.0	2.7	1.7	2.5	2.0	1.3	2.5	1.5	1.5	2.7	<b>43.4</b>	5
Kingfish/Amberjack ( <i>Seriola lalandi</i> , <i>S.dumerilli</i> )	2.3	2.7	2.3	1.3	1.7	2.3	1.7	2.7	2.0	1.7	1.0	1.0	2.0	2.0	2.0	1.5	3.0	2.0	1.0	2.0	2.0	1.0	2.0	<b>43.2</b>	3
<b>Queenfish</b> ( <i>Scomberoides commersonnianus</i> )	1.3	2.7	1.7	1.0	1.3	2.3	1.0	2.7	2.2	1.3	1.0	1.0	2.2	2.3	2.0	1.5	1.5	3.0	1.5	2.5	2.0	2.0	2.7	<b>42.7</b>	6
Tailor ( <i>Pomatomus saltatrix</i> )	2.3	2.8	2.6	1.0	1.3	1.6	1.0	2.4	1.4	1.3	1.0	1.4	2.1	2.7	1.3	1.3	3.0	1.0	1.0	3.0	3.0	1.8	2.3	<b>42.5</b>	7

<b>Emperors - Red throated/Red</b> ( <i>Lethrinus sebae</i> , <i>Lethrinus miniatus</i> )	3.0	1.1	1.9	1.2	1.5	2.4	2.4	1.7	1.0	1.4	1.0	1.2	1.7	1.8	2.6	1.8	3.0	1.3	1.4	2.6	2.0	1.8	2.5	<b>42.4</b>	10
<b>Billfish- marlin, sailfish and swordfish</b> ( <i>Xiphiidae</i> and <i>Istiophoridae</i> spp)	1.0	3.0	1.3	2.0	1.0	1.0	1.5	1.8	3.0	1.8	1.0	1.0	2.3	2.3	3.0	1.5	2.0	3.0	1.0	2.5	2.0	1.0	2.5	<b>42.3</b>	4
<b>Coral Trout</b> ( <i>Plectropomus</i> spp)	3.0	1.4	2.2	1.4	1.5	2.3	2.3	2.0	1.1	1.3	1.0	1.7	1.8	2.0	2.0	1.3	3.0	1.2	1.2	3.0	2.2	1.8	1.6	<b>42.2</b>	10
<b>Sweetlips</b> (Family Haemulidae)	2.5	1.3	2.3	1.0	1.3	3.0	2.0	2.0	1.0	1.5	1.0	1.3	1.8	2.3	2.0	2.0	2.7	1.3	1.3	2.5	2.0	2.0	2.3	<b>42.2</b>	4
<b>Cobbler</b> ( <i>C. macrocephalus</i> )	2.0	1.0	1.7	1.0	2.0	2.0	1.0	1.3	1.0	1.3	1.0	1.0	1.3	1.3	2.0	2.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	<b>42.0</b>	3
<b>Tunas-Bigeye, Bluefin, Yellowfin etc</b> ( <i>Thunnus</i> spp)	1.8	3.0	1.2	1.0	1.4	1.2	1.2	2.7	3.0	1.8	1.0	1.3	2.7	2.2	2.5	1.0	2.5	2.0	1.0	2.5	2.0	1.0	2.0	<b>41.9</b>	6
Teraglin ( <i>Atractoscion aequidens</i> )	2.5	1.0	2.2	1.0	1.5	2.5	3.0	2.0	1.0	1.2	1.0	1.3	2.8	2.0	1.6	1.2	2.5	1.2	1.2	2.0	2.3	2.4	2.4	<b>41.7</b>	6
<b>Threadfin - blue</b> , northern, Gunther's and black-finned ( <i>Polydactylus</i> spp)	2.2	2.1	2.0	1.0	1.9	2.1	1.6	2.4	1.7	1.0	1.0	1.1	2.0	2.3	2.5	1.5	2.0	2.0	1.0	2.5	1.0	2.0	2.7	<b>41.6</b>	7
Whiting, western sand, school & yellowfin	3.0	1.3	2.4	1.0	1.4	2.0	1.1	2.2	1.2	1.2	1.0	1.4	2.1	2.6	1.4	2.0	3.0	1.4	1.6	1.8	2.0	2.0	2.3	<b>41.5</b>	9
<b>Bream-black</b> , yellowfin, northwest black, ( <i>Acanthopagrus</i> spp)	2.9	1.3	2.3	1.3	1.1	2.6	1.1	2.1	1.1	1.4	1.0	1.3	1.5	2.3	1.9	2.1	2.6	1.1	1.6	2.9	2.3	1.9	2.0	<b>41.4</b>	14
<b>Maori wrasse</b> ( <i>Cheilinus</i> spp)	2.8	1.0	1.8	1.0	1.9	2.3	2.0	2.2	1.3	1.3	1.0	1.0	1.7	2.0	2.8	2.0	1.7	1.3	1.8	2.7	2.0	1.3	2.2	<b>41.0</b>	6
<b>Cobia</b> ( <i>Rachycentron canadus</i> )	2.4	2.4	2.0	1.4	1.2	2.0	1.6	2.6	2.6	1.2	1.0	1.0	1.6	1.8	1.5	1.5	2.0	2.0	1.0	2.0	2.0	1.0	2.5	<b>40.3</b>	5
<b>Mangrove jack</b> ( <i>Lutjanus argentimaculatus</i> )	2.4	2.7	2.4	1.0	1.1	1.7	1.9	2.1	1.1	1.0	1.0	1.1	1.4	1.9	2.4	2.2	2.2	2.0	1.3	2.0	1.6	1.6	2.0	<b>40.3</b>	7
Grunters (Family Terapontidae)	3.0	1.4	2.4	1.0	1.4	2.2	1.6	1.8	1.2	1.0	1.0	1.0	1.4	2.0	2.0	2.3	1.5	1.6	1.5	2.5	2.0	2.0	2.3	<b>40.1</b>	5
Luderick ( <i>Girella</i> spp)	3.0	1.5	2.0	1.5	2.0	1.0	1.0	1.5	1.0	1.5	1.0	2.0	1.0	2.0	2.0	1.0	2.0	1.0	2.0	3.0	3.0	2.0	2.0	<b>40.0</b>	2
Flathead ( <i>Platycephalus fuscus</i> )	3.0	1.8	2.1	1.7	1.1	2.6	1.0	2.0	1.0	1.3	1.0	1.1	1.0	2.2	1.4	1.8	2.6	1.8	1.2	2.4	2.2	1.6	2.0	<b>39.8</b>	9
<b>Bonitos</b> , oriental ( <i>Sarda orientalis</i> ), leaping ( <i>Cybiosarda elegans</i> )	1.0	2.3	1.2	1.4	1.0	1.5	1.2	2.6	2.2	1.8	1.0	1.2	2.4	2.4	1.5	1.5	2.0	3.0	1.0	2.5	1.5	1.0	2.5	<b>39.7</b>	5
<b>Threadfin -king</b> ( <i>Eleutheronema tetradactylum</i> )	2.5	2.5	1.8	1.0	1.3	2.0	1.1	2.4	2.0	1.3	1.0	1.0	1.6	2.0	1.7	1.8	1.8	1.5	1.3	2.0	1.5	2.0	2.3	<b>39.0</b>	8
<b>Catfish</b> ( <i>N.australis</i> , <i>N.thalassina</i> )	2.0	1.0	1.0	1.0	1.0	3.0	1.0	2.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0	1.0	2.0	2.0	<b>39.0</b>	1	
Dart ( <i>Trachinotus</i> spp)	2.2	2.0	1.3	1.2	1.0	2.5	1.2	2.0	1.5	1.2	1.0	1.0	1.2	2.3	1.0	1.7	2.0	3.0	2.0	2.0	1.3	2.0	2.3	<b>38.8</b>	6
<b>Garfish</b> ( <i>Hemirhamphidae</i> spp)	3.0	1.0	1.5	1.0	1.0	1.0	1.0	3.0	1.0	1.0	1.0	1.0	2.5	2.5	1.0	1.0	2.0	3.0	2.0	2.0	3.0	1.0	2.0	<b>38.5</b>	2
Mahi-mahi, dolphinfish ( <i>Coryphaena hippurus</i> )	3.0	2.0	2.0	1.5	1.0	2.0	1.5	2.0	2.0	2.0	1.0	1.0	2.0	2.0	1.8	1.0	1.8	1.0	1.0	1.8	1.3	1.0	2.8	<b>38.3</b>	2
Tarwhine ( <i>Rhabdosargus sarba</i> )	1.8	1.0	2.3	1.0	1.5	2.3	1.5	1.5	1.0	1.0	1.0	1.0	1.8	2.0	1.5	2.0	2.0	1.5	1.5	2.0	1.5	2.5	2.0	<b>37.0</b>	4
<b>Trevally</b> , silver ( <i>Pseudocaranx dentex</i> )	2.0	2.4	1.0	1.0	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.5	2.0	2.0	3.0	1.5	2.5	2.0	1.5	3.0	<b>37.0</b>	1
Pike ( <i>D. lewini</i> )	1.5	1.0	1.5	1.0	1.5	2.5	1.0	1.5	1.0	1.0	1.0	1.5	1.5	2.0	1.0	1.5	1.5	3.0	2.0	2.5	1.5	1.5	2.5	<b>36.5</b>	2
Flounder ( <i>Pseudorhombus</i> spp)	3.0	1.0	3.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	1.0	2.0	<b>36.0</b>	1
<b>Mullet-sea/yelloweye</b> ( <i>Mugil cephalus</i> , <i>Aldrichetta forsteri</i> )	2.0	1.0	2.0	1.0	1.0	1.3	1.3	2.0	1.0	1.0	1.0	1.3	1.3	1.7	1.0	1.0	2.3	1.3	1.0	3.0	2.3	1.3	1.7	<b>34.0</b>	3