|  | Aculeola<br>nigra              | Alopias<br>pelagicus       | Alopias<br>superciliosus      | Alopias<br>vulpinus          | Apristurus<br>albisoma      | Apristurus<br>ampliceps      | Apristurus<br>aphyodes      | Apristurus<br>australis      | Apristurus<br>bucephalus      | Apristurus<br>exsanguis       | Apristurus<br>garricki         | Apristurus<br>japonicus        | Apristurus<br>laurussonii        | Apristurus<br>manis          | Apristurus<br>melanoasper     | Apristurus<br>microps           | Apristurus<br>micropterygeus   | Apristurus<br>profundorum      | Brachaelurus<br>colcloughi | Brachaelurus<br>waddi       | Bythaelurus<br>canescens      |   |
|--|--------------------------------|----------------------------|-------------------------------|------------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|----------------------------------|------------------------------|-------------------------------|---------------------------------|--|--------------------------------|----------------------------|-----------------------------|-------------------------------|---|
| 1.0                                      |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
| 0.0 -                                    | Carcharhinus<br>Ilbimarginatus | Carcharhinus<br>altimus    | Carcharhinus amblyrhynchos    | Carcharhinus<br>amboinensis  | Carcharhinus<br>borneensis  | Carcharhinus<br>brachyurus   | Carcharhinus<br>brevipinna  | Carcharhinus<br>cautus       | Carcharhinus cerdale          | Carcharhinus coatesi          | Carcharhinus<br>dussumieri     | Carcharhinus<br>falciformis    | Carcharhinus<br>fitzroyensis     | Carcharhinus<br>galapagensis | Carcharhinus<br>hemiodon      | Carcharhinus<br>humani          | Carcharhinus<br>isodon   | Carcharhinus<br>leiodon        | Carcharhinus<br>limbatus   | Carcharhinus<br>Iongimanus  | Carcharhinus<br>macloti       |   |
| 1.0 <b>-</b><br>0.5 <b>-</b>             |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                | [                              |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
| 0.0 -                                    | Carcharhinus<br>melanopterus   | Carcharhinus<br>obscurus   | Carcharhinus plumbeus         | Carcharhinus porosus         | Carcharhinus<br>sealei      | Carcharhinus<br>signatus     | Carcharhinus<br>sorrah      | Carcharhinus<br>tilstoni     | Carcharhinus<br>tjutjot       | Centrophorus tessellatus      | Centroscyllium excelsum        | Centroscyllium fabricii        | Centroscyllium kamoharai         | Centroscyllium ornatum       | Centroscymnus<br>macracanthus | Cephaloscyllium laticeps        | Cephaloscyllium sarawakensis   | Cephaloscyllium silasi         | Cephaloscyllium umbratile  | Cephaloscyllium ventriosum  | Chiloscyllium punctatum       |   |
| 1.0 -<br>0.5 -                           | meianopterus                   | Obscurus                   | pumbeus                       | porosus                      | Sealer                      | Signatus                     | Sorial                      | uistoiii                     | Julyon                        | tessenatus                    | excersum                       | Tablell                        | Kamonarai                        | Griaturi                     | macracantinus                 | lauceps                         | Salawarelisis  | Silasi                         | umbradie                   | ventriosum                  | punctatum                     |   |
| 0.0 -                                    | lamydoselachus                 | Dalatias                   | Deania                        | Eridacnis                    | Eridacnis                   | Etmopterus                   | Etmopterus                  | Etmopterus .                 | Etmopterus                    | Etmopterus                    | Etmopterus                     | Etmopterus                     | Etmopterus                       | Etmopterus                   | Etmopterus                    | Euprotomicrus                   | Eusphyra   | Furgaleus                      | Galeus                     | Gogolia                     | Halaelurus                    |   |
| 1.0 -<br>0.5 -                           | africana                       | licha                      | profundorum                   | radcliffei                   | sinuans                     | bullisi                      | burgessi                    | compagnoi                    | dianthus                      | fusus                         | granulosus                     | litvinovi                      | spinax                           | splendidus                   | viator                        | bispinatus                      | blochii  | macki                          | melastomus                 | filewoodi                   | lineatus                      |   |
| 0.0 —                                    | Halaelurus                     | Hemigaleus                 | Hemigaleus                    | Hemiscyllium                 | Hemiscyllium                | Hemitriakis                  | Hemitriakis                 | Hemitriakis                  | Hemitriakis                   | Hemitriakis                   | Heterodontus                   | Heterodontus                   | Heterodontus                     | Heterodontus                 | Heterodontus                  | Heterodontus                    | Heterodontus   | Heterodontus                   | Heterodontus               | Hexanchus                   | Hypogaleus                    |   |
| 1.0                                      | natalensis                     | australiensis              | microstoma                    | halmahera                    | strahani                    | complicofasciata             | falcata                     | indroyonoi                   | japanica                      | leucoperiptera                | francisci                      | galeatus                       | japonicus                        | mexicanus                    | omanensis                     | portusjacksoni                  | quoyi  | ramalheira                     | zebra                      | griseus                     | hyugaensis                    |   |
| 0.0                                      | lago                           | lago                       | Isistius                      | Isistius                     | Isogomphodon                | Isurus                       | Isurus                      | Lamiopsis                    | Lamiopsis                     | Lamna                         | Leptocharias                   | Loxodon                        | Megachasma                       | Mustelus                     | Mustelus                      | Mustelus                        | Mustelus   | Mustelus                       | Mustelus                   | Mustelus                    | Mustelus                      |   |
| 1.0                                      | garricki                       | omanensis                  | brasiliensis                  | plutodus                     | oxyrhynchus                 | oxyrinchus                   | paucus                      | temminckii                   | tephrodes                     | nasus                         | smithii                        | macrorhinus                    | pelagios                         | albipinnis                   | antarcticus                   | asterias                        | californicus   | dorsalis                       | fasciatus                  | griseus                     | lenticulatus                  |   |
| 0.0                                      | Mustelus                       | Mustelus                   | Mustelus                      | Mustelus                     | Mustelus                    | Mustelus                     | Mustelus                    | Mustelus                     | Mustelus                      | Mustelus                      | Mustelus                       | Mustelus                       | Nasolamia                        | Orectolobus                  | Orectolobus                   | Orectolobus                     | Orectolobus  | Orectolobus                    | Orectolobus                | Orectolobus                 | Orectolobus                   |   |
| 1.0                                      | lunulatus                      | manazo                     | mento                         | minicanis                    | mosis                       | mustelus                     | norrisi                     | ravidus                      | schmitti                      | sinusmexicanus                | whitneyi                       | widodoi                        | velox                            | floridus                     | halei                         | hutchinsi                       | japonicus  | leptolineatus                  | maculatus                  | parvimaculatus              | reticulatus                   |   |
| 0.5 <del> </del><br>0.0 <del> </del><br> | Organish                       | Ovunatus                   | Opportuni                     | Payanalana                   | Powerstown                  | Payaget                      | Payanatana                  | Payment                      | Downstown                     | Pontonchi                     | Plene                          | Puis                           | Dviotie u b - ···                | Phinasta                     | Phirongiana                   | Phirancian                      | Phirancian   | Phirancian                     | Phirenview                 | Phirangian                  | Phiranciana                   |   |
| 1.0                                      | Orectolobus<br>wardi           | Oxynotus<br>japonicus      | Oxynotus<br>paradoxus         | Paragaleus<br>leucolomatus   | Paragaleus pectoralis       | Paragaleus<br>randalli       | Paragaleus<br>tengi         | Parmaturus<br>lanatus        | Parmaturus<br>macmillani      | Pentanchus<br>profundicolus   | Planonasus<br>parini           | Prionace<br>glauca             | Pristiophorus<br>nudipinnis      | Rhincodon<br>typus           | Rhizoprionodon acutus         | Rhizoprionodon<br>lalandii      | Rhizoprionodon longurio  | Rhizoprionodon oligolinx       | Rhizoprionodon porosus     | Rhizoprionodon<br>taylori   | Rhizoprionodon terraenovae    |   |
| 0.5 +<br>0.0 -                           |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
| 1.0 -                                    | Scyliorhinus<br>torazame       | Scylliogaleus<br>quecketti | Scymnodon<br>ringens          | Sphyrna<br>corona            | Sphyrna<br>lewini           | Sphyrna<br>media             | Sphyrna<br>mokarran         | Sphyrna<br>tiburo            | Sphyrna<br>tudes              | Sphyrna<br>zygaena            | Squaliolus<br>aliae            | Squaliolus<br>laticaudus       | Squalus<br>acanthias             | Squalus<br>altipinnis        | Squalus<br>cubensis           | Squalus<br>edmundsi             | Squalus<br>griffini  | Squalus<br>hemipinnis          | Squalus<br>mitsukurii      | Squalus<br>notocaudatus     | Squalus<br>raoulensis         |   |
| 0.5<br>0.0                               |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
| 1.0 -                                    | Squatina<br>aculeata           | Squatina<br>africana       | Squatina<br>albipunctata      | Squatina<br>argentina        | Squatina<br>armata          | Squatina<br>australis        | Squatina<br>californica     | Squatina<br>formosa          | Squatina<br>guggenheim        | Squatina<br>japonica          | Squatina<br>nebulosa           | Squatina<br>occulta            | Squatina<br>pseudocellata        | Squatina<br>squatina         | Squatina<br>tergocellata      | Squatina tergocellatoides       | Sutorectus<br>tentaculatus   | Triaenodon<br>obesus           | Triakis<br>acutipinna      | Triakis<br>maculata         | Triakis<br>scyllium           |   |
| 0.5                                      |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               | Scenario<br>— BAU   |
| 10-                                      | Apristurus<br>brunneus         | Apristurus<br>fedorovi     | Apristurus<br>gibbosus        | Apristurus<br>herklotsi      | Apristurus<br>internatus    | Apristurus<br>Iongicephalus  | Apristurus<br>macrorhynchus | Apristurus<br>macrostomus    | Apristurus<br>nasutus         | Apristurus<br>pinguis         | Apristurus<br>platyrhynchus    | Apristurus<br>saldanha         | Apristurus<br>sinensis           | Asymbolus<br>analis          | Asymbolus occiduus            | Asymbolus<br>pallidus           | Asymbolus<br>parvus  | Asymbolus<br>rubiginosus       | Asymbolus<br>vincenti      | Atelomycterus<br>baliensis  | Atelomycterus<br>erdmanni     | <ul><li>High Mortality</li><li>Median Mortality</li></ul> |
| ₹ 0.5<br>0.0                             |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               | Low Mortality   |
| 1 0 -                                    | Atelomycterus<br>fasciatus     | Atelomycterus<br>macleayi  | Atelomycterus<br>marmoratus   | Atelomycterus<br>marnkalha   | Aulohalaelurus<br>kanakorum | Aulohalaelurus<br>labiosus   | Bythaelurus<br>clevai       | Bythaelurus<br>dawsoni       | Bythaelurus<br>hispidus       | Bythaelurus<br>immaculatus    | Bythaelurus<br>lutarius        | Carcharhinus<br>acronotus      | Carcharhinus<br>amblyrhynchoides | Carcharhinus<br>leucas       | Carcharias<br>taurus          | Carcharodon<br>carcharias       | Centrophorus<br>atromarginatus   | Centrophorus<br>granulosus     | Centrophorus<br>harrissoni | Centrophorus<br>isodon      | Centrophorus<br>moluccensis   | Group   |
| 0.5                                      |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               | 2   |
| 1.0                                      | Centrophorus<br>squamosus      | Centrophorus<br>uyato      | Centrophorus<br>westraliensis | Centroscyllium<br>granulatum | Centroscyllium<br>nigrum    | Centroscyllium<br>ritteri    | Centroscymnus<br>coelolepis | Centroscymnus<br>owstonii    | Cephaloscyllium<br>albipinnum | Cephaloscyllium<br>fasciatum  | Cephaloscyllium<br>hiscosellum | Cephaloscyllium<br>isabellum   | Cephaloscyllium<br>signourum     | Cephaloscyllium<br>speccum   | Cephaloscyllium<br>sufflans   | Cephaloscyllium<br>variegatum   | Cephalurus<br>cephalus   | Cetorhinus<br>maximus          | Chiloscyllium<br>arabicum  | Chiloscyllium<br>burmensis  | Chiloscyllium<br>griseum      |   |
| 0.5<br>0.0                               |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
|  | Chiloscyllium<br>indicum       | Chiloscyllium<br>plagiosum | Chlamydoselachus<br>anguineus | Cirrhigaleus<br>asper        | Cirrhigaleus<br>australis   | Cirrhigaleus<br>barbifer     | Cirrhoscyllium<br>expolitum | Cirrhoscyllium<br>formosanum | Cirrhoscyllium<br>japonicum   | Deania<br>calcea              | Deania<br>quadrispinosa        | Echinorhinus<br>brucus         | Echinorhinus<br>cookei           | Eridacnis<br>barbouri        | Etmopterus<br>bigelowi        | Etmopterus<br>brachyurus        | Etmopterus<br>decacuspidatus   | Etmopterus<br>dislineatus      | Etmopterus<br>evansi       | Etmopterus<br>gracilispinis | Etmopterus<br>hillianus       |   |
| 1.0<br>0.5<br>0.0                        |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
|  | Etmopterus<br>joungi           | Etmopterus<br>lucifer      | Etmopterus<br>molleri         | Etmopterus<br>perryi         | Etmopterus<br>polli         | Etmopterus<br>princeps       | Etmopterus<br>pusillus      | Etmopterus pycnolepis        | Etmopterus<br>robinsi         | Etmopterus<br>schultzi        | Etmopterus<br>sculptus         | Etmopterus<br>sentosus         | Etmopterus<br>unicolor           | Etmopterus virens            | Eucrossorhinus<br>dasypogon   | Figaro<br>boardmani             | Figaro<br>striatus   | Galeocerdo<br>cuvier           | Galeorhinus<br>galeus      | Galeus<br>atlanticus        | Galeus<br>eastmani            |   |
| 1.0 -<br>0.5 -                           |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
|  | Galeus<br>gracilis             | Galeus<br>Iongirostris     | Galeus<br>mincaronei          | Galeus<br>murinus            | Galeus<br>nipponensis       | Galeus<br>piperatus          | Galeus<br>polli             | Galeus<br>sauteri            | Galeus<br>schultzi            | Ginglymostoma<br>cirratum     | Gollum<br>attenuatus           | Halaelurus<br>boesemani        | Halaelurus<br>buergeri           | Halaelurus<br>quagga         | Halaelurus<br>sellus          | Haploblepharus<br>edwardsii     | Haploblepharus<br>fuscus   | Haploblepharus<br>kistnasamyi  | Haploblepharus pictus      | Hemipristis<br>elongata     | Hemiscyllium<br>freycineti    |   |
| 1.0 -<br>0.5 -                           |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
|  | Hemiscyllium<br>galei          | Hemiscyllium<br>hallstromi | Hemiscyllium<br>henryi        | Hemiscyllium<br>michaeli     | Hemiscyllium<br>ocellatum   | Hemiscyllium<br>trispeculare | Hemitriakis<br>abdita       | Heptranchias<br>perlo        | Hexanchus<br>nakamurai        | Holohalaelurus<br>favus       | Holohalaelurus<br>grennian     | Holohalaelurus<br>melanostigma | Holohalaelurus<br>punctatus      | Holohalaelurus<br>regani     | Lamna<br>ditropis             | Mitsukurina<br>owstoni          | Mustelus<br>canis  | Mustelus<br>canis<br>insularis | Mustelus<br>henlei         | Mustelus<br>higmani         | Mustelus<br>palumbes          |   |
| 1.0 -<br>0.5 -                           |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  | in Sularis                     |                            |                             |                               |   |
| 0.0 -                                    | Mustelus<br>punctulatus        | Mustelus<br>stevensi       | Mustelus<br>walkeri           | Nebrius<br>ferrugineus       | Negaprion<br>acutidens      | Negaprion<br>brevirostris    | Notorynchus<br>cepedianus   | Odontaspis<br>ferox          | Odontaspis<br>noronhai        | Orectolobus ornatus           | Oxynotus<br>bruniensis         | Oxynotus<br>caribbaeus         | Oxynotus centrina                | Parascyllium collare         | Parascyllium ferrugineum      | Parascyllium<br>sparsimaculatum | Parascyllium variolatum  | Parmaturus<br>melanobranchus   | Parmaturus<br>pilosus      | Parmaturus<br>xaniurus      | Pliotrema<br>warreni          |   |
| 1.0 -<br>0.5 -                           |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               |                                |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |
| 0.0 -                                    | Poroderma<br>africanum         | Poroderma<br>pantherinum   | Pristiophorus cirratus        | Pristiophorus<br>delicatus   | Pristiophorus japonicus     | Pristiophorus<br>lanae       | Pristiophorus nancyae       | Proscyllium<br>habereri      | Proscyllium<br>magnificum     | Pseudocarcharias<br>kamoharai | Pseudotriakis<br>microdon      | Rhina<br>ancylostoma           | Rhynchobatus<br>australiae       | Rhynchobatus<br>djiddensis   | Rhynchobatus<br>laevis        | Rhynchobatus<br>luebberti       | Rhynchobatus palpebratus   | Rhynchobatus springeri         | Schroederichthys bivius    | Schroederichthys chilensis  | Schroederichthys saurisqualus |   |
| 1.0 -<br>0.5 -                           |                                | panino initiani            |                               |                              | удрешале                    |                              |                             |                              |                               |                               |                                |                                |                                  | - Spillation                 |                               |                                 | parposition of the state of the | - Fillingen                    |                            |                             |                               |   |
| 0.0 <del>L</del>                         | chroederichthys                | Scoliodon                  | Scoliodon                     | Scyliorhinus                 | Scyliorhinus                | Scyliorhinus                 | Scyliorhinus                | Scyliorhinus                 | Scyliorhinus                  | Scyliorhinus                  | Scyliorhinus                   | Scymnodalatias                 | Scymnodalatias                   | Scymnodalatias               | Somniosus                     | Somniosus                       | Somniosus  | Somniosus                      | Somniosus                  | Squalus                     | Squalus                       |   |
| 1.0<br>0.5                               | tenuis                         | laticaudus                 | macrorhynchos                 | boa                          | canicula                    | capensis                     | cervigoni                   | comoroensis                  | haeckelii                     | retifer                       | stellaris                      | albicauda                      | garricki                         | sherwoodi                    | antarcticus                   | longus                          | microcephalus  | pacificus                      | rostratus                  | albifrons                   | blainville                    |   |
| 0.0 —                                    | Squalus                        | Squalus                    | Squalus                       | Squalus                      | Squalus                     | Squalus                      | Squalus                     | Squalus                      | Squalus                       | Squalus                       | Squalus                        | Squalus                        | Squalus                          | Squatina dumeril             | Squatina                      | Triakis                         | Triakis  | Trigonognathus kabeyai         | Zameus                     | 0 50 10015020               | 00 50 10015020                | 0   |
| 1.0 -<br>0.5 -                           | brevirostris                   | bucephalus                 | chloroculus                   | crassispinus                 | formosus                    | grahami                      | japonicus                   | megalops                     | melanurus                     | montalbani                    | nasutus                        | rancureli                      | suckleyi                         | dumeril                      | oculata                       | megalopterus                    | semifasciata   | kabeyai                        | squamulosus                |                             |                               |   |
| 0.0 4                                    | 50 100150200                   | 0 50 100150200             | 00 50 100150200               | 0 50 100150200               | 0 50 10015020               | 00 50 10015020               | 00 50 100150200             | 0 50 100150200               | 00 50 10015020                | 00 50 10015020                |                                | 00 50 10015020                 | 00 50 10015020                   | 00 50 100150200              | 00 50 100150200               | 00 50 10015020                  | 00 50 10015020   | 00 50 100150200                | 00 50 100150200            | )                           |                               |   |
|  |                                |                            |                               |                              |                             |                              |                             |                              |                               |                               | Time                           |                                |                                  |                              |                               |                                 |  |                                |                            |                             |                               |   |