Threat & conservation action schema

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Code** | **Scheme description** | **Scheme** |
|  |  |  |  |
| **Habitat altered** | 0.1 (habitat altered - not targeted restoration) | 0.1 Habitat alteration but not restoration | Added |
|  | 0.1.1 (Small-scale habitat altered - not targeted restoration) | 0.1.1 Small scale alteration | Added |
|  | 0.1.2 (Large-scale habitat altered - not targeted restoration) | 0.1.2 Large-scale alteration | Added |
|  | 0.2 (General fragmentation) | 0.2 Fragmentation | Added |
|  | 0.2.1 (Small-scale fragmentation) | 0.2.1 Little fragmentation | Added |
|  | 0.2.2 (Large-scale fragmentation) | 0.2.2 Large-scale fragmentation | Added |
|  |  |  |  |
| **Residential & commercial development** | 1.1 (Habitat urbanised) | 1.1 Housing & urban areas | Threats |
| 1.2 (Habitat industrialised) | 1.2 Commercial & industrial areas | Threats |
| 1.3 (Habitat made available for recreation) | 1.3 Tourism & recreation areas | Threats |
|  |  |  |  |
| **Agriculture & aquaculture** | 2.1 (Habitat altered for farming) | 2.1 Annual & perennial non-timber crops | Threats |
| - | 2.1.1 Shifting agriculture | Threats X |
| 2.1.2 (Habitat altered for small-scale farming) | 2.1.2 Small-holder farming | Threats |
|  | 2.1.3 (Habitat altered for large-scale farming) | 2.1.3 Agro-industry farming | Threats |
|  | 2.2 (Habitat altered for plantations) | 2.2 Wood & pulp plantations | Threats |
|  | 2.2.1 (Habitat altered for small-scale plantations) | 2.2.1 Small-holder plantations | Threats |
|  | 2.2.2 (Habitat altered for large-scale plantations) | 2.2.2 Agro-industry plantations | Threats |
|  | - | 2.2.3 Scale unknown/Unrecorded | Threats X |
|  | 2.3 (Habitat altered for ranching) | 2.3 Livestock farming & ranching | Threats |
|  | 2.3.1 (Habitat altered for nomadic ranching) | 2.3.1 Nomadic grazing | Threats |
|  | 2.3.2 (Habitat altered for small-scale ranching) | 2.3.2 Small-holder grazing, ranching or farming | Threats |
|  | 2.3.3 (Habitat altered for large-scale ranching) | 2.3.3 Agro-industry grazing, ranching or farming | Threats |
|  | - | 2.3.4 Scale unknown/Unrecorded | Threats X |
|  | - | 2.4 Marine & freshwater aquaculture | Threats X |
|  | - | 2.4.1 Subsistence/artisanal aquaculture | Threats X |
|  | - | 2.4.2 Industrial aquaculture | Threats X |
|  | - | 2.4.3 Scale unknown/Unrecorded | Threats X |
|  |  |  |  |
| **Energy production & mining** | - | 3.1 Oil & gas drilling | Threats X |
| - | 3.2 Mining & quarrying | Threats X |
| - | 3.3 Renewable energy | Threats X |
|  |  |  |  |
| **Transportation & service corridors** | 4.1 (Road & railroads generally) | 4.1 Roads & railroads | Threats |
| 4.1.1 (Developing roads & rails) | 4.1.1 Roads & railroads development | Added |
| 4.1.2 (Vehicle collisions) | 4.1.2 Roads & railroads vehicle collisions | Added |
|  | - | 4.2 Utility & service lines | Threats X |
|  | - | 4.3 Shipping lanes | Threats X |
|  | - | 4.4 Flight paths | Threats X |
|  |  |  |  |
| **Human intrusions & disturbance** | 6.1 (Disturbance from recreational activities) | 6.1 Recreational activities | Threats |
| 6.2 (Disturbance from war) | 6.2 War, civil unrest & military exercises | Threats |
| 6.3 (Disturbance from people working) | 6.3 Work & other activities | Threats |
|  | - | 6.4 Other disturbance | Threats X |
|  |  |  |  |
| **Natural system modifications** | 7.1 (System altered by excess fire) | 7.1 Fire & fire suppression | Threats |
| 7.1.1 (System altered by fire shortage) | 7.1.1 Increase in fire frequency/intensity | Threats |
|  | - | 7.1.2 Suppression in fire frequency/intensity | Threats X |
|  | - | 7.1.3 Trend unknown/Unrecorded | Threats X |
|  | 7.2 (System altered by water shortage/dams) | 7.2 Dams & water management/use | Threats |
|  | 7.3 (System altered by ecosystem modifications) | 7.3 Other ecosystem modifications | Threats |
|  |  |  |  |
| **Invasive & other problematic species, genes & diseases** | 8.1 (Population effected by invasive disease) | 8.1 Invasive non-native/alien species/diseases | Threats |
| - | 8.1.1 Unspecified species | Threats X |
| - | 8.1.2 Named species | Threats X |
| 8.2 (Population effected by native disease) | 8.2 Problematic native species/diseases | Threats |
|  | - | 8.2.1 Unspecified species | Threats X |
|  | - | 8.2.2 Named species | Threats X |
|  | 8.3 (Population effected by introduced genes) | 8.3 Introduced genetic material | Threats |
|  | - | 8.4 Problematic species/diseases of unknown origin | Threats X |
|  | - | 8.4.1 Unspecified species | Threats X |
|  | - | 8.4.2 Named species | Threats X |
|  | - | 8.5 Viral/prion-induced diseases | Threats X |
|  | - | 8.5.1 Unspecified species | Threats X |
|  | - | 8.5.2 Named species | Threats X |
|  | 8.6 (Population effected by unknown disease) | 8.6 Diseases of unknown cause | Threats |
|  | - | 8.7 General disease | Threats X |
|  |  |  |  |
| **Pollution** | 9.1 (Population/Habitat effected by domestic waste) | 9.1 Domestic & urban waste water | Threats |
|  | 9.2 (Population/Habitat effected by industrial waste) | 9.2 Industrial & military effluents | Threats |
|  | - | 9.3 Agricultural & forestry effluents | Threats X |
|  | - | 9.4 Garbage & solid waste | Threats X |
|  | - | 9.5 Air-borne pollutants | Threats X |
|  | - | 9.6 Excess energy | Threats X |
|  | 9.6.1 (Population/Habitat effected by light pollution) | 9.6.1 Light pollution | Threats |
|  | 9.6.2 (Population/Habitat effected by thermal pollution) | 9.6.2 Thermal pollution | Threats |
|  | 9.6.3 (Population/Habitat effected by noise pollution) | 9.6.3 Noise pollution | Threats |
|  | - | 9.6.4 Type unknown/unrecorded | Threats X |
|  |  |  |  |
| **Geological events** | 10.1 (Population/Habitat effected by volcanoes) | 10.1 Volcanoes | Threats |
| 10.2 (Population/Habitat effected by earthquakes/tsunamis) | 10.2 Earthquakes/tsunamis | Threats |
|  | 10.3 (Population/Habitat effected by avalanches/landslides) | 10.3 Avalanches/landslides | Threats |
|  |  |  |  |
| **Climate change & severe weather** | 11.1 (Habitat shifts from climate change) | 11.1 Habitat shifting & alteration | Threats |
| 11.2 (Population/Habitat effected by drought) | 11.2 Droughts | Threats |
| 11.3 (Population/Habitat effected by temperature extremes) | 11.3 Temperature extremes | Threats |
|  | 11.4 (Population/Habitat effected by storms/flooding) | 11.4 Storms & flooding | Threats |
|  | 11.5 (Population/Habitat effected by unspecified climate change) | 11.5 Other impacts | Threats |
|  |  |  |  |
| **Biological resource use – adapted from section 5 of threats v3.2 to make all actions legal** | 13.1 (General legal hunting) | 5.1 Hunting & collecting terrestrial animals | Threats |
| 13.1.1 (Legal hunting of carnivore) | 5.1.1 Intentional use (species being assessed is the target) | Threats |
| 13.1.2 (Indirect effect from legal hunting) | 5.1.2 Unintentional effects (species being assessed is not the target) | Threats |
| 13.1.3 (Legal persecution/control of carnivore) | 5.1.3 Persecution/control | Threats |
| - | 5.1.4 Motivation unknown/Unrecorded | Threats X |
|  | 13.2 (Indirect effect of gathering plants) | 5.2 Gathering terrestrial plants | Threats |
|  | - | 5.2.1 Intentional use (species being assessed is the target) | Threats X |
|  | - | 5.2.2 Unintentional effects (species being assessed is not the target) | Threats X |
|  | - | 5.2.3 Persecution/control | Threats X |
|  | - | 5.2.4 Motivation unknown/Unrecorded | Threats X |
|  | - | 5.3 Logging & wood harvesting | Threats X |
|  | - | 5.3.1 Intentional use: subsistence/small scale (species being assessed is the target [harvest] | Threats X |
|  | - | 5.3.2 Intentional use: large scale (species being assessed is the target)[harvest] | Threats X |
|  | - | 5.3.3 Unintentional effects: subsistence/small scale (species being assessed is not the target)[harvest] | Threats X |
|  | - | 5.3.4 Unintentional effects: large scale (species being assessed is not the target)[harvest] | Threats X |
|  | - | 5.3.5 Motivation unknown/Unrecorded | Threats X |
|  | 13.4 (Indirect effect of fishing) | 5.4 Fishing & harvesting aquatic resources | Threats |
|  | - | 5.4.1 Intentional use: subsistence/small scale (species being assessed is the target)[harvest] | Threats X |
|  | - | 5.4.2 Intentional use: large scale (species being assessed is the target)[harvest] | Threats X |
|  | 13.4.3 (Indirect effect of small-scale fishing) | 5.4.3 Unintentional effects: subsistence/small scale (species being assessed is not the target) [harvest] | Threats |
|  | 13.4.4 (Indirect effect of large-scale fishing) | 5.4.4 Unintentional effects: large scale (species being assessed is not the target) [harvest] | Threats |
|  | - | 5.4.5 Persecution/control | Threats X |
|  | - | 5.4.6 Motivation unknown/Unrecorded | Threats X |
|  | 13.5 (Legal poisoning of carnivore) | 5.5 Poisoning | Added |
|  | 13.5.1 (Legal targeting poison towards carnivore) | 5.5.1 Intentional use (species being assessed is the target) | Added |
|  | 13.5.2 (Legal indirect poison of carnivore) | 5.5.2 Unintentional effects (species being assessed is not the target) | Added |
|  |  |  |  |
| **Biological resource use – adapted from section 5 of threats v3.2 to make all actions illegal** | 14.1 (General illegal hunting/poaching) | 5.1 Hunting & collecting terrestrial animals | Threats |
| 14.1.1 (Illegal hunting of carnivore/poaching) | 5.1.1 Intentional use (species being assessed is the target) | Threats |
| 14.1.2 (Indirect effect from illegal hunting/poaching) | 5.1.2 Unintentional effects (species being assessed is not the target) | Threats |
| 14.1.3 (Illegal persecution/control of carnivore) | 5.1.3 Persecution/control | Threats |
| - | 5.1.4 Motivation unknown/Unrecorded | Threats X |
|  | 14.2 (Indirect effect of gathering plants) | 5.2 Gathering terrestrial plants | Threats |
|  | - | 5.2.1 Intentional use (species being assessed is the target) | Threats X |
|  | - | 5.2.2 Unintentional effects (species being assessed is not the target) | Threats X |
|  | - | 5.2.3 Persecution/control | Threats X |
|  | - | 5.2.4 Motivation unknown/Unrecorded | Threats X |
|  | - | 5.3 Logging & wood harvesting | Threats X |
|  | - | 5.3.1 Intentional use: subsistence/small scale (species being assessed is the target [harvest] | Threats X |
|  | - | 5.3.2 Intentional use: large scale (species being assessed is the target)[harvest] | Threats X |
|  | - | 5.3.3 Unintentional effects: subsistence/small scale (species being assessed is not the target)[harvest] | Threats X |
|  | - | 5.3.4 Unintentional effects: large scale (species being assessed is not the target)[harvest] | Threats X |
|  | - | 5.3.5 Motivation unknown/Unrecorded | Threats X |
|  | 14.4 (Indirect effect of illegal fishing) | 5.4 Fishing & harvesting aquatic resources | Threats |
|  | - | 5.4.1 Intentional use: subsistence/small scale (species being assessed is the target)[harvest] | Threats X |
|  | - | 5.4.2 Intentional use: large scale (species being assessed is the target)[harvest] | Threats X |
|  | 14.4.3 (Indirect effect of small-scale illegal fishing) | 5.4.3 Unintentional effects: subsistence/small scale (species being assessed is not the target) [harvest] | Threats |
|  | 14.4.4 (Indirect effect of large-scale illegal fishing) | 5.4.4 Unintentional effects: large scale (species being assessed is not the target) [harvest] | Threats |
|  | - | 5.4.5 Persecution/control | Threats X |
|  | - | 5.4.6 Motivation unknown/Unrecorded | Threats X |
|  | 14.5 (Illegal poisoning of carnivore) | 5.5 Poisoning | Added |
|  | 14.5.1 (Illegal targeting poison towards carnivore) | 5.5.1 Intentional use (species being assessed is the target) | Added |
|  | 14.5.2 (Illegal indirect poison of carnivore) | 5.5.2 Unintentional effects (species being assessed is not the target) | Added |
|  |  |  |  |
| **Biological population drivers** | 15.1 (General competition) | 15.1 Competition | Added |
| 15.1.1 (Low competition - incomplete guild) | 15.1.1 Low inter-specific competition – incomplete carnivore guild | Added |
| 15.1.2 (Low competition - no reason) | 15.1.2 Low competition (reason not described) | Added |
| 15.1.3 (High competition - within guild) | 15.1.3 High inter-specific competition within guild | Added |
|  | 15.1.5 (High competition - no reason) | 15.1.5 High competition (reason not described) | Added |
|  | 15.1.6 (Low prey availability) | 15.1.6 Low prey availability | Added |
|  | 15.1.7 (High prey availability) | 15.1.7 High prey availability | Added |
|  | 15.1.8 (Competition from invasive species) | 15.1.8 Invasive non-native/alien species/diseases | Added |
|  | 15.2 (Carnivore predated) | 15.2 Predation | Added |
|  | 15.2.1 (Low predation risk - unbalanced guild ) | 15.2.1 Low predation risk – unbalanced guild | Added |
|  | 15.2.2 (Low predation risk - no reason) | 15.2.2 Low predation risk (reason not described | Added |
|  | 15.2.3 (High predation risk - unbalanced guild) | 15.2.3 High predation risk – unbalanced guild | Added |
|  | 15.2.4 (High predation risk - no reason) | 15.2.4 High predation risk (reason not described) | Added |
|  | 15.2.5 (Predation from invasive species) | 15.2.5 Invasive effects predation | Added |
|  | 15.3 (Below Minimum Viable Population) | 15.3 Population at minimum level | Added |
|  | 15.4 (High immigration/emigration) | 15.4 Population open | Added |
|  | 15.4.1 (High emigration) | 15.4.1 Emigration out of population | Added |
|  | 15.4.2 (High immigration) | 15.4.2 Immigration into population present | Added |
|  | 15.4.3 (Population expanding/recolonising areas) | 15.4.3 Range expansion/natural recolonization. | Added |
|  | 15.5 (Population closed/isolated) | 15.5 Population closed | Added |
|  | 15.5.1 (Low connectivity in population) | 15.5.1 Low connectivity | Added |
|  | 15.5.2 (Low connectivity - Inbreeding possible) | 15.5.2 Low connectivity – inbreeding possible | Added |
|  | 15.5.3 (Low connectivity - Inbreeding present) | 15.5.3 Low connectivity – inbreeding present | Added |
|  | 15.5.4 (No connectivity in population) | 15.5.4 No connectivity | Added |
|  | 15.5.5 (No connectivity - Inbreeding possible) | 15.5.5 No connectivity – inbreeding possible | Added |
|  | 15.5.6 (No connectivity - Inbreeding present) | 15.5.6 No connectivity – inbreeding present | Added |
|  | 15.5.7 (Unspecified genetic threat) | 15.5.7 Unspecified genetic threat | Added |
|  |  |  |  |
| **Land/water protection** | 1.1 (Protected area) | 1.1 Site/area protection | Conservation |
| 1.2 (Protected habitat) | 1.2 Resource & habitat protection | Conservation |
|  | 1.3 (Habitat developed over - considering sustainability) | 1.3 Resource & habitat protection | Conservation |
|  |  |  |  |
| **Land/water management** | 2.1 (Site managed) | 2.1 Site/area management | Conservation |
| 2.2 (Control of problematic species) | 2.2 Invasive/problematic species control | Conservation |
|  | 2.3 (Habitat restoration) | 2.3 Habitat & natural process restoration | Conservation |
|  |  |  |  |
| **Species management** | 3.1 (Species managed) | 3.1 Species management | Conservation |
| 3.1.1 (Harvest managed) | 3.1.1 Harvest management | Conservation |
|  | 3.1.2 (Trade managed) | 3.1.2 Trade management | Conservation |
|  | 3.1.3 (Population growth managed - culling) | 3.1.3 Limiting population growth | Conservation |
|  | 3.2 (Action to enable population recovery) | 3.2 Species recovery | Conservation |
|  | 3.3 (Re-introduction) | 3.3 Species re-introduction | Conservation |
|  | - | 3.3.1 Reintroduction | Conservation X |
|  | 3.3.2 (Benign introduction) | 3.3.2 Benign introduction | Conservation |
|  | 3.4 (Ex-situ - captive breeding/artificial propagation) | 3.4 Ex-situ conservation | Conservation |
|  | - | 3.4.1 Captive breeding/artificial propagation | Conservation X |
|  | - | 3.4.2 Genome resource bank | Conservation X |
|  |  |  |  |
| **Education & awareness** | 4.1 (Formal education) | 4.1 Formal education | Conservation |
| 4.2 (Train practitioners) | 4.2 Training | Conservation |
|  | 4.3 (Educate public) | 4.3 Awareness & communications | Conservation |
|  |  |  |  |
| **Law & policy** | 5.1 (General protective legislation) | 5.1 Legislation | Conservation |
|  | 5.1.1 (International legislation) | 5.1.1 International level | Conservation |
|  | 5.1.2 (National legislation) | 5.1.2 National level | Conservation |
|  | 5.1.3 (Regional legislation) | 5.1.3 Sub-national level | Conservation |
|  | - | 5.1.4 Scale unspecified | Conservation X |
|  | 5.2 (Protective policy) | 5.2 Policies and regulations | Conservation |
|  | - | 5.3 Private Sector Standards & Codes | Conservation X |
|  | 5.4 (Enforcing general policy/legislation) | 5.4 Compliance and enforcement | Conservation |
|  | 5.4.1 (Enforcing international policy/legislation) | 5.4.1 International level | Conservation |
|  | 5.4.2 (Enforcing National policy/legislation) | 5.4.2 National level | Conservation |
|  | 5.4.3 (Enforcing Regional policy/legislation) | 5.4.3 Sub-national level | Conservation |
|  | - | 5.4.4 Scale unspecified | Conservation X |
|  |  |  |  |
| **Livelihood, economic & other incentives** | 6.1 (Communities livelihood linked to species success)) | 6.1 Linked enterprises & livelihood alternatives | Conservation |
| 6.2 (Substitute carnivore for sustainable alternative) | 6.2 Substitution | Conservation |
| 6.3 (Carnivore market managed e.g. hunting levy) | 6.3 Market forces | Conservation |
|  | 6.4 (Compensation schemes) | 6.4 Conservation payments | Conservation |
|  | 6.5 (Utilise spiritual/religious connections for management) | 6.5 Non-monetary values | Conservation |