

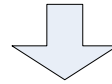
NDF Workshop

Cycads & Succulents

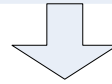




Application to trade in X
number of specimens of
a species



Gather
information



Decision

- IUCN guidelines
- Taxon specific guidelines

Yes

Yes, but $< X$

No

Framework for NDF Cycads & Succulents

RISK BASED NDF ASSESSMENT

Assessment of risk to
species from trade
event

- Species ID
- Mixing of art prop & wild sources
- Material from different harvesting sources
- Harvesting event

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Framework for NDF Cycads & Succulents

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Assessment of risk to
the species from the
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- Resilience
 - Life history
 - population size
- Harvest patterns



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Assessment of risk to
the ecosystem from
the harvest event/s

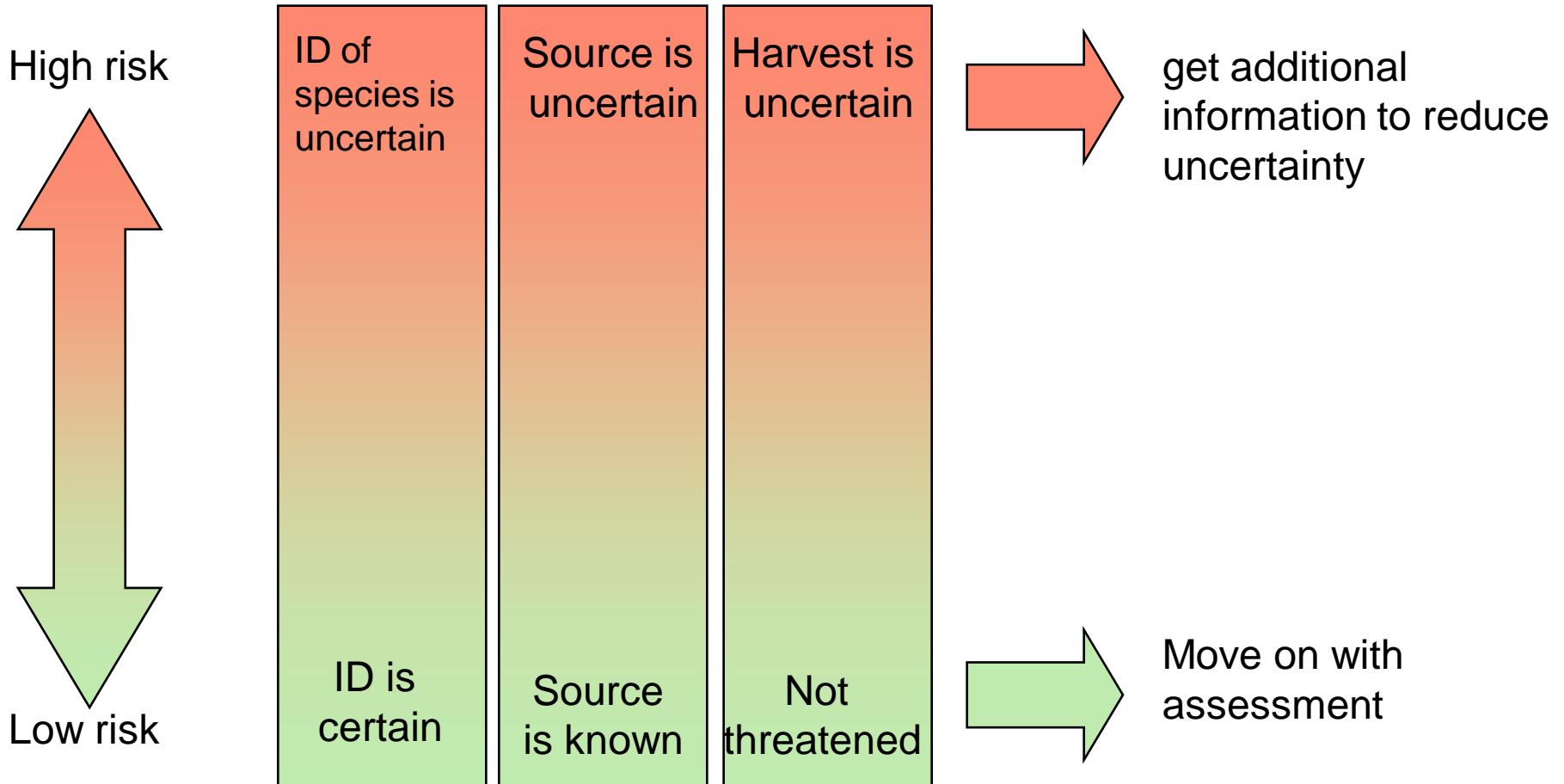
- Impact on dependent spp
- Impact on processes
- Impact of harvest method



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Risk factors (cycads & succulents)

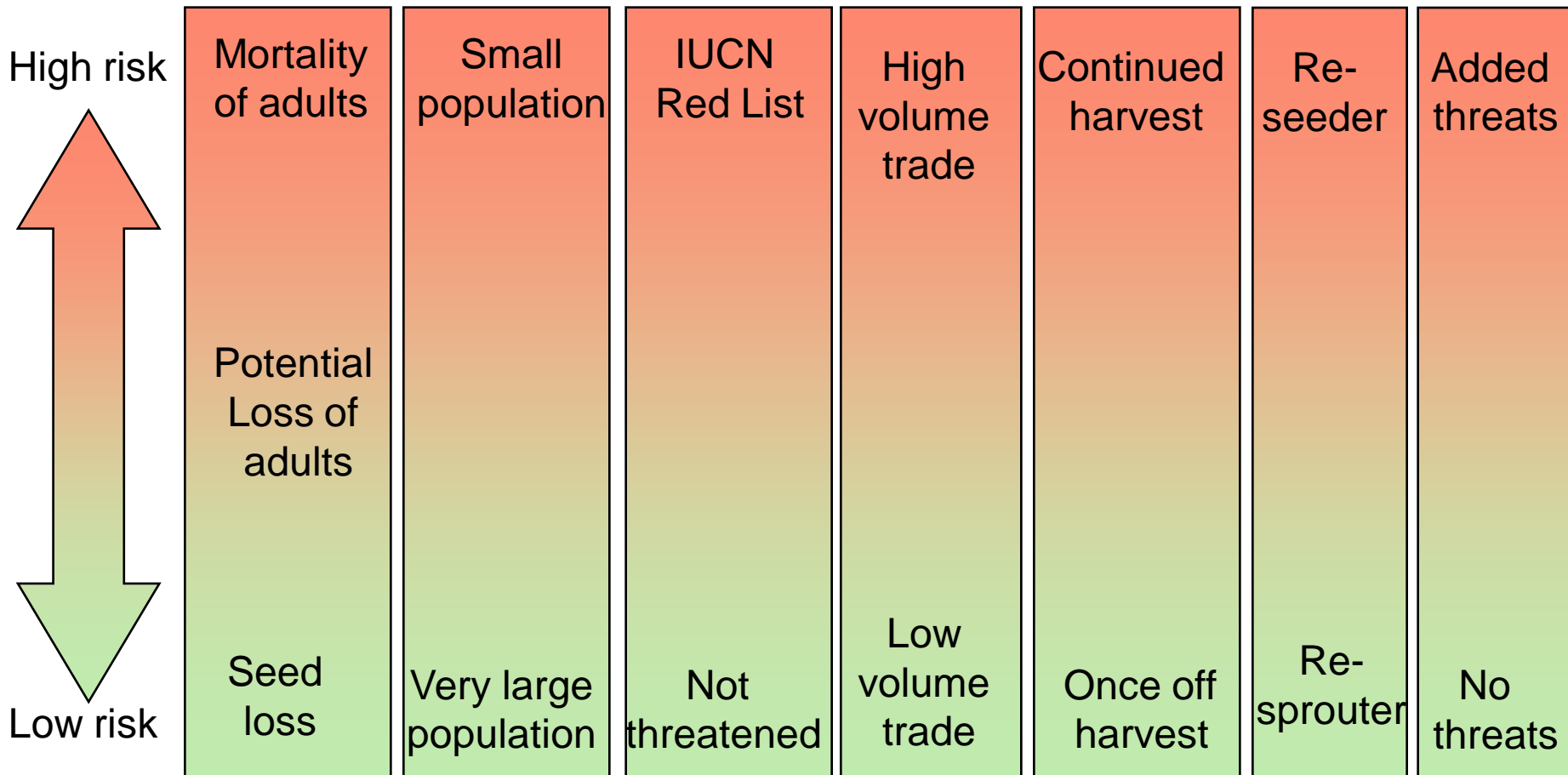
Trade events



Effective management plan is in place

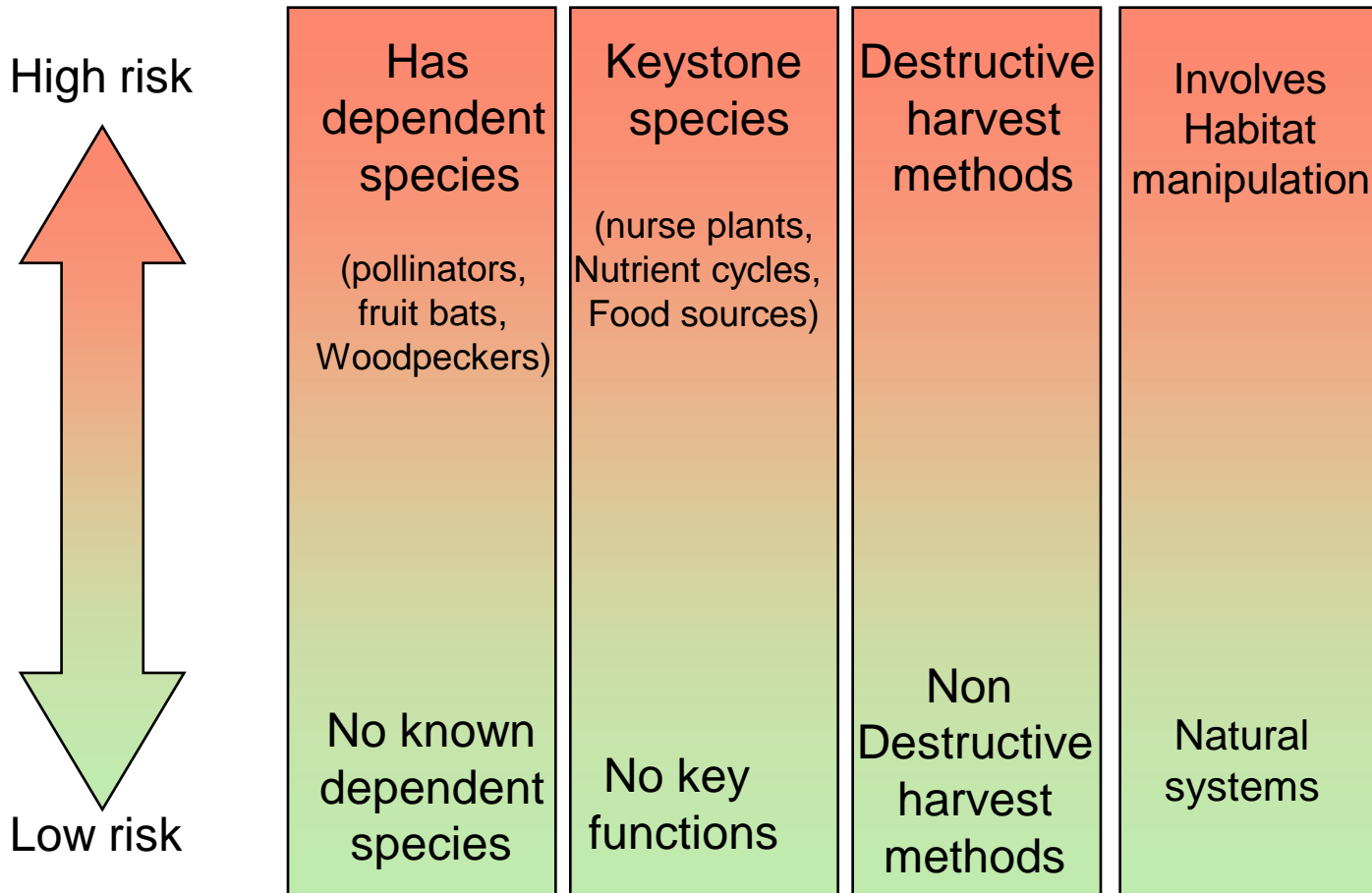
Risk factors (cycads & succulents)

impact of harvesting on species



Risk factors (cycads & succulents)

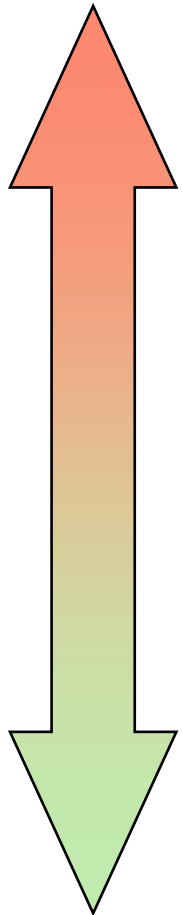
Impact of harvesting on ecosystem



Information requirements relating to risk factors

Information requirements

High risk



Low risk

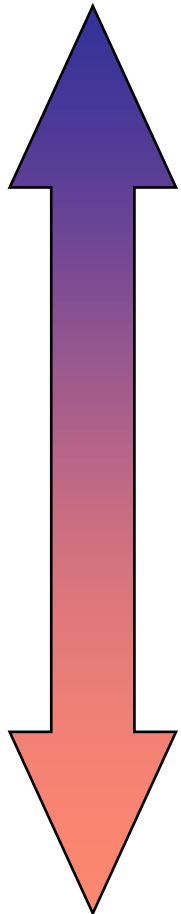
- Vulnerable stages
- Genetic structure
- Recruitment data
- Life span
- Harvest capacity
- Trade frequency and intensity
- Management plan
- Monitoring actions / plots

- More detail on vulnerable life stages
- Recovery span of leaf-stems-flower removals

- Distribution range
- Species Id
- Population size
- Conservation status
- Trade frequency and intensity
- Basic life history information on vulnerable stages

Confidence in the NDF based on available information

High confidence



Low

- Vulnerable stages
- Genetic structure
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SPECIFIC OUTPUTS

Cycads & Succulents



Elements that could be considered when making Non-detriment findings (specific to cycads & succulents):

- Habitat condition (as an indicator of other impacts on the population)
- Pollinators (cycads and many succulents have specific pollinators)
- Population health (e.g dead-live ratios, infections, predation)
- Growth rates (individual growth rates)
- Mortality (where harvesting of dead material is important)

**Elements that could be considered when making
Non-detriment findings (specific to cycads &
succulents):**

1.2. Takes/uses (e.g. harvest regime):

- Trade history (what volume has been harvested in the past)
- Frequency of harvest (sporadic, continuous, once off..)
- Harvest method (destructive/ non-destructive)
- Quantities (material harvested)
- Part of the plant being harvested (removal of whole adult plant, seedlings/ juveniles, seed, leaves, bark, male cone, fruits, stems)

Elements that could be considered when making Non-detriment findings (specific to cycads & succulents):

1.3. Management, monitoring and conservation:

- Existing management plan (incl. traditional systems)
- Prescribed methodologies exist and are being used for surveys & assessments;
- Adherence to management plan
- Regular monitoring is taking place (e.g. live/dead ratios, recruitment, recovery)
- Artificial propagation (in situ/ ex situ)
- Extent of illegal trade

Data integration that could be helpful in formulating the non-detriment finding.

- Biological data (to determine production) and market data (to determine demand) integrated to determine whether offtake is likely to impact populations;
- Spatial information on species abundance and harvesting to ensure that NDF accounts for possible clustering of trade in specific areas;
- Harvesting history and trends;
- Type, method, and frequency of harvesting and its impact on vulnerable stages
- Management plan (with monitoring programme)
- Information on threats (e.g. invasives, habitat degradation) with information on sites where harvesting occurs
- Threat data, spatial distribution, and harvesting data
- Legal and illegal harvest values (socio-economic information)

Common problems, error, challenges or difficulties found on the elaboration of NDF

- Identification of species in trade (species & commodities)
- Mixed sources of specimens in trade (wild & artificially propagated; in situ and ex situ nurseries)
- Limits to generalization (from specific sites)
- Lack of information on resilience to harvesting
- Uncertainty about the extent of illegal trade
- Incomplete information across the range of the species
- Inadequate monitoring and feedback
- Climate change
- Challenge: good set of information for all the species listed on CITES
- Capacity in country to generate relevant information

Thanks

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