

ADDITIONAL FILE 4: Large Herbivores and Climate Change – Systematic Map

Screening: Decision Trees and Notes

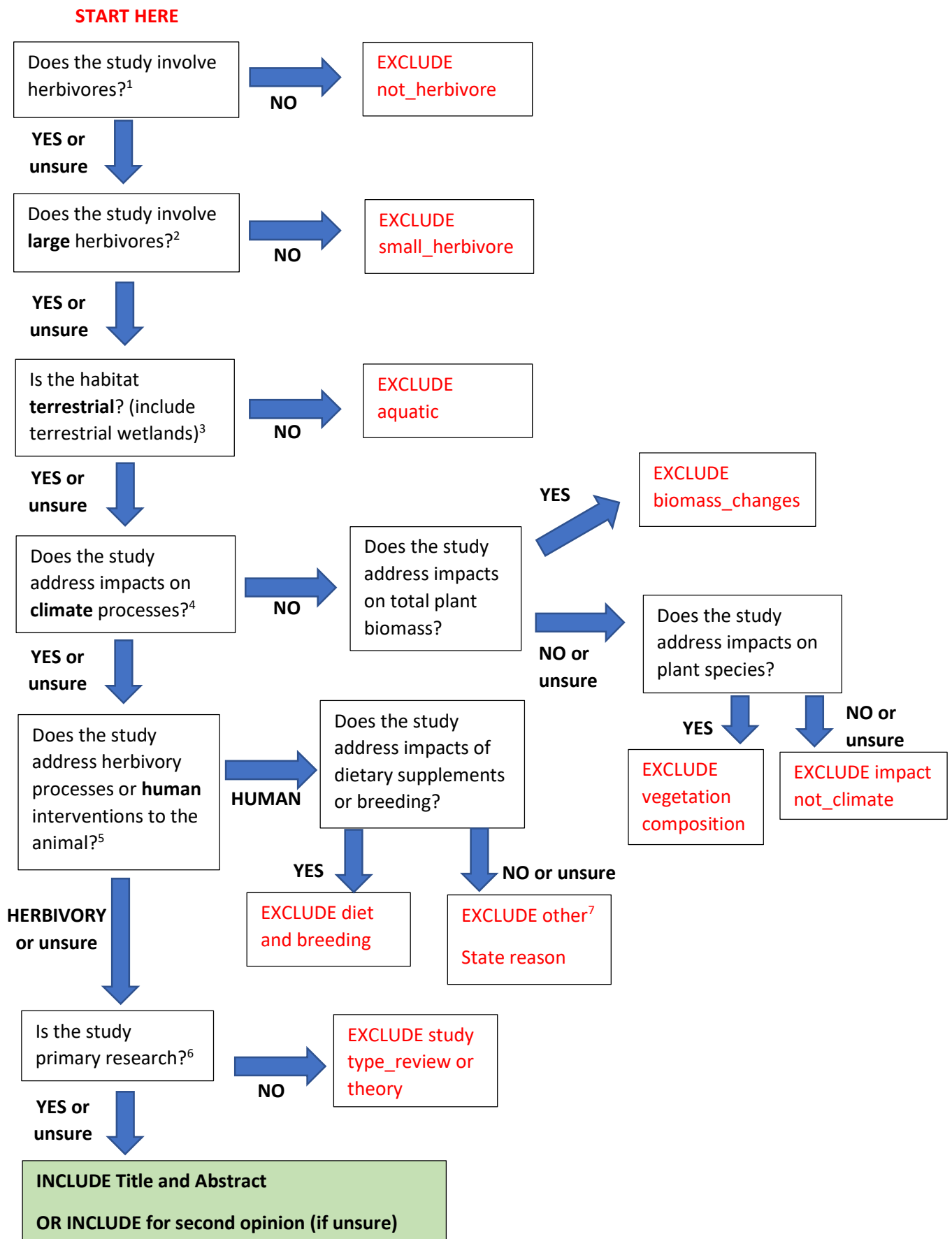
NOTES

These notes refer to the numbered notes on the accompanying decision trees.

Please read them to be familiar with the key terms and concepts in the decision trees. Some of the definitions will be tricky for particular species or habitats – when in doubt please err on the side of caution and include rather than exclude.

1. Herbivores – include all herbivores from all taxonomic groups (eg. mammals, marsupials, reptiles, invertebrates etc). Also include omnivores that are primarily herbivorous e.g. pigs. Exclude carnivores.
2. Large herbivores – include all herbivores that are approximately 10kg (adult weight) and larger. In general, this will mean including goats, deer, beavers and larger herbivores, but excluding invertebrates, rodents and lagomorphs.
3. Terrestrial habitats – include all terrestrial habitats, even ‘wetland’ habitats such as marshes, fens and bogs. Exclude purely aquatic habitats such as oceans, lakes and rivers.
4. Climate processes – include all climate feedback and forcing effects, such as carbon (aboveground and below-ground carbon, soil carbon); greenhouse gases (including methane, nitrous oxide, carbon dioxide), albedo, and wildfires. Exclude changes in vegetation composition and structure – unless these are being studied as a factor in these processes.
5. Herbivory or human processes – herbivory processes include all natural herbivore behaviours (eg. browsing, grazing, defecation, digestion, trampling etc). ‘Human’ interventions include artificial measures to influence emissions, such as dietary supplements or artificial breeding to reduce methane emissions.
6. Primary research – this includes all papers that present original data. This may be any type of primary study, including field studies, remote sensing and modelling. Excludes papers that are literature reviews or purely theoretical. Meta analyses should be included where they analyse data to produce novel evidence.
7. Exclude ‘other’ – this category should be selected when the reason for excluding the study has not been covered by any other exclusion category. When selecting this option, please click the ‘info’ box next to the category and briefly state the reason for exclusion.

DECISION TREE: Screening (Title and Abstract)



DECISION TREE: Screening (Full Text)

NOTES: For numbered notes on the decision tree please refer to the ‘Notes’ above (on page 1 of this document).

Exclusion criteria have been slightly modified for full text screening:

- Exclusion categories ‘biomass changes’ and ‘vegetation composition’ have been removed as both fit under the exclusion category of ‘not climate impact’.
- Exclusion categories ‘not_herbivore’ and ‘small_herbivore’ have been merged into one exclusion category of ‘not_large_herbivore’.
- Exclusion categories ‘not_Europe’ and ‘full_text_unavailable’ have been added.

*For the purposes of the Systematic Map, Europe is defined by geographical rather than political boundaries, following the Britannica map of Europe:

<https://www.britannica.com/place/Europe#/media/1/195686/1453>

Greenland is therefore excluded and European regions of Turkey and Russia included.

