

Data Submitted (UTC 11): 7/23/2022 11:46:34 AM

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Comments: A Revised Definition of "Mature Forest" and "Old Growth Forest"

In order to meet the expressed and implied intent of Executive Order 14072, it is recommended that a revised formal definition of a "Mature Forest" and an "Old Growth Forest" be adopted and working definitions be derived that are used in informal communications. Herein is a recommended definition for these terms. The formal definition is expressed as a set of properties which must be met in order for a stand of organisms to be determined to be a forest of these types. These definitions recognize kelp forests as forest proper and are included in the definitions. If this is contrary to the purpose of Executive Order 14072, that portion of the definitions may be removed. In this case, it is recommended to include a footnote that kelp forests technically belong in the definition. These definitions attempt to be objective, enduring and measurable to a practical extent.

This is intended to be an apolitical statement of definition. Any interpretation otherwise is a misperception. The author declares no competing interests.

Determining whether or not a stand constitutes a "Mature Forest" or "Old Growth Forest" can be assessed using a checklist of criterion based upon these definitions. If all of the defining criterion are met, then it is a "Mature Forest" or an "Old Growth Forest" as defined herein.

A "Mature Forest" is defined as a "stand" of organisms in their natural setting with the following properties:

1. Constituents: includes members of the phylum Tracheophyta which are perennial having single central woody stems (trees), and/or order Laminariales (kelp)
  2. Delineation: exists entirely within a single biome and has a well defined border based on a consistent constitution and/or physical boundaries.
  3. Location: exists within a forest biome or marine biome within the littoral/neritic zones.
  4. Age when constituted: the age where the undisturbed stand reaches a steady-state not ecologically successional ecosystem composition through natural processes, notwithstanding invasive species impacts, and under existing climatological conditions.
  5. Includes an adjacent buffer zone surrounding the forest which is not a part of the forest proper but is necessary and sufficient to act in preservation of the undisturbed state of the forest proper.
- When all of these conditions are met, then the object is a "Mature Forest".

An "Old Growth Forest" is defined as:

1. a "Mature Forest" as defined herein that has the following additional properties,
2. has existed as a "mature forest" for at least as long as 1/3 of an average human lifespan.
3. is "old" as experienced from the perspective of a human individual having a limited lifespan who is a member of the collective of rightful owners and who benefits from and is entitled to non-disturbing enjoyment of the forest.
4. could not be recreated or restored to the original naturally occurring and undisturbed state or would require longer than 1/3 of an average human lifespan to recreate or restore from a disturbed state to the original naturally occurring and undisturbed state.

When all of these conditions are met, then the object is an "Old Growth Forest".