

Anthropogenic Vegetation Classification

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Intrinsic Anthropogenism

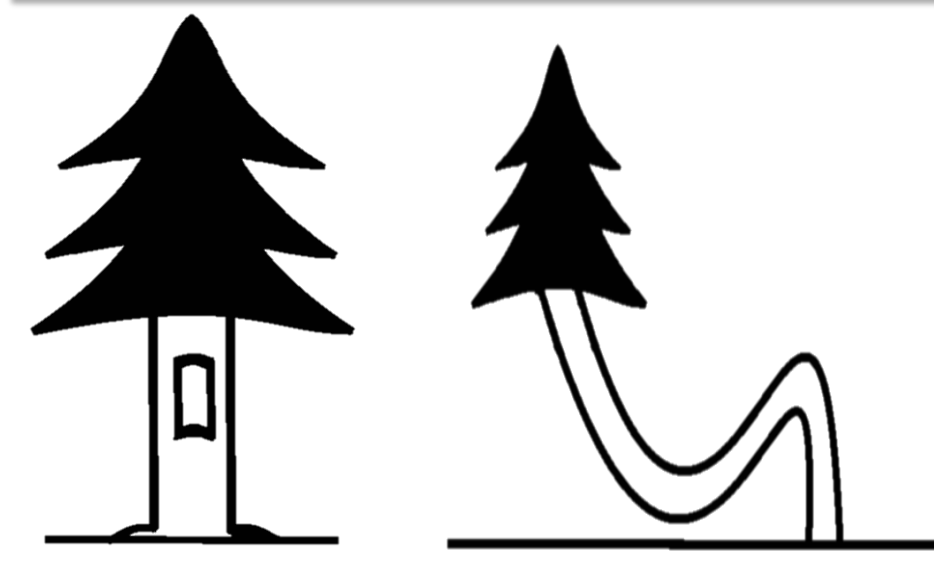
Extrinsic Anthropogenism

Human-created or
Introduction
Dependent Species



These are species innately associated with human manipulation of the environment through known human uses, activities, and introduction, such as *cultivars* or *ornamentals*.

Direct Modification
to a Plant



These are plants which are overtly *physically changed* by *humans*, trained/bent, cut, marked/carved, enwrapped, & painted by human actions, they may be living or dead.

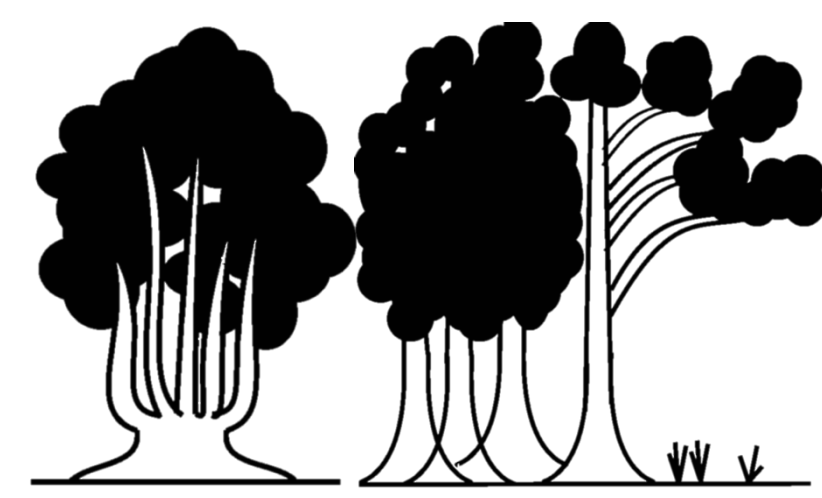
Qualitative Context

Relational Context

Spatial Context

Edaphic Effects

Indirect
Modification to
a Plant



These modifications are *non-human agents'* responses (secondarily) caused by the human interactions with the environment.

Botanical Co-occurrences



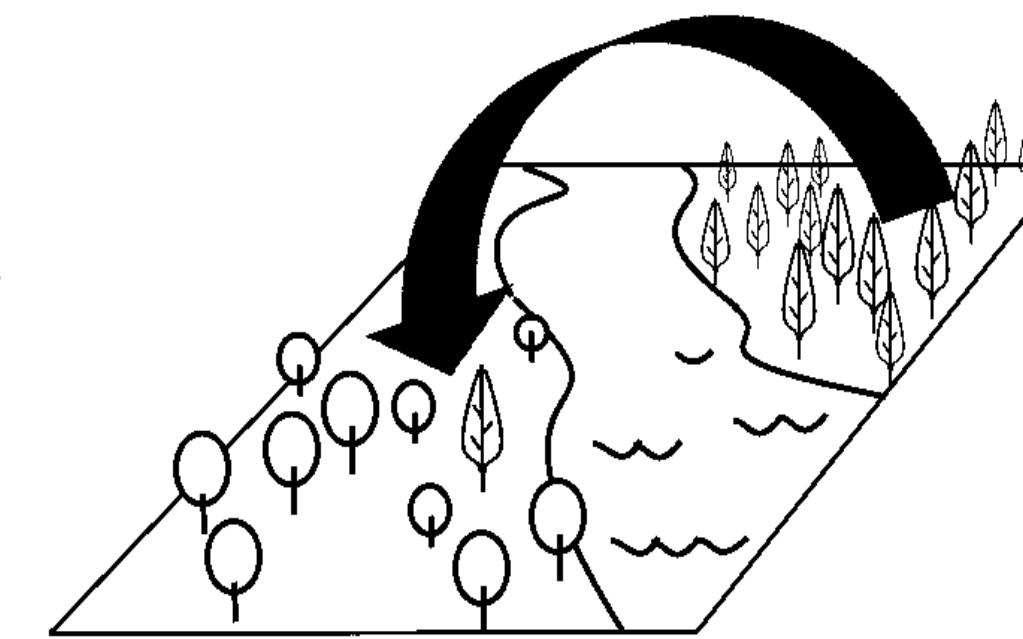
An association between *species co-occurring together* in such a way to indicate human activities & disturbances (e.g., forest succession)

Plant-Site Associations



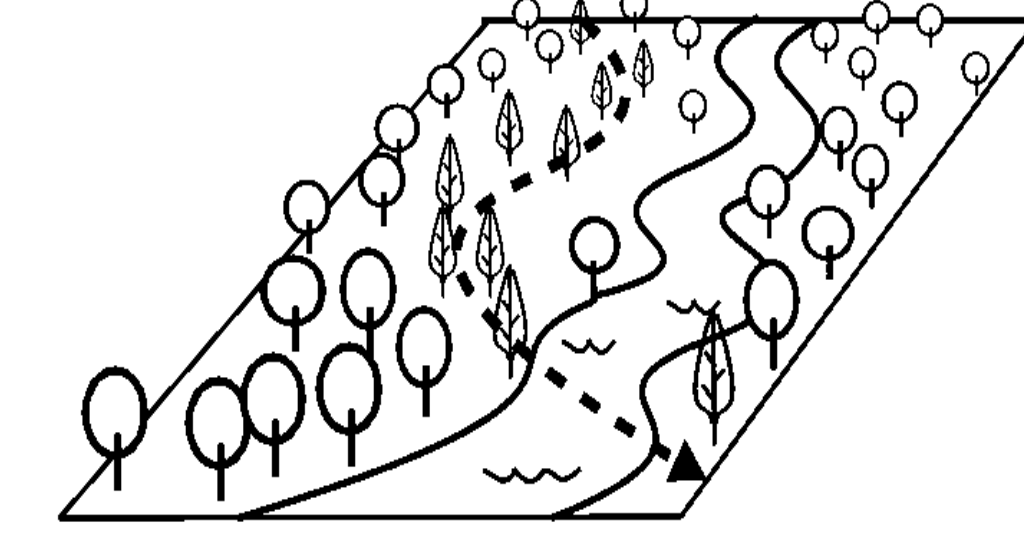
An *observed* association between a species and a particular cultural feature/site, also including a concentration of a species *characterizing* a site.

Anthrophytes



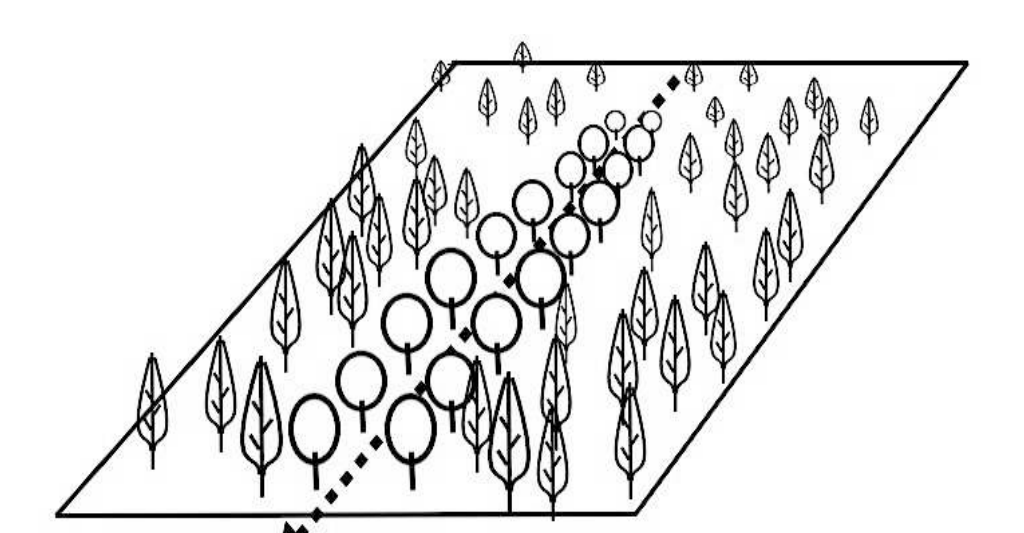
Plants thriving outside their natural range or habitat, due to the need for intentional or *unintentional* human agency to aid in its *dispersal* beyond its natural range/barriers

Non-random
Distribution
Patterns



Geometric or asymmetrical patterns of plants due to *human distribution activities* or inhabiting an environmental *niche* created by the human-modified soil conditions of cultural features.

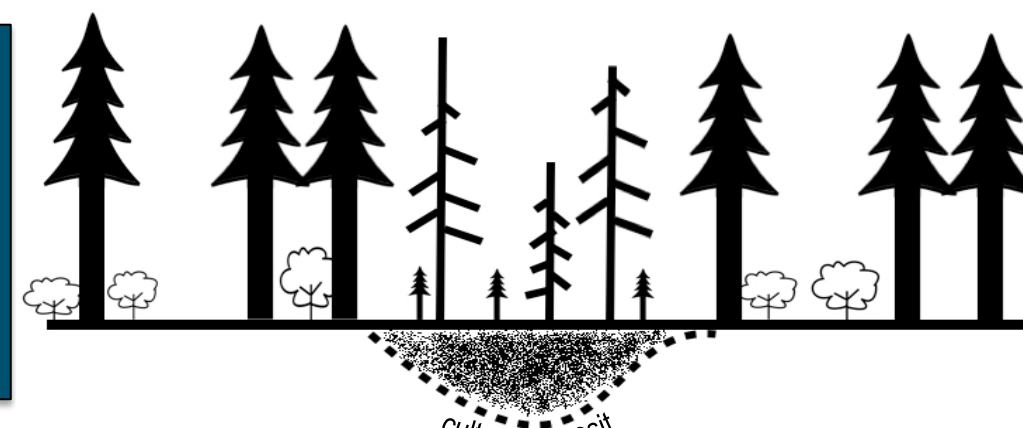
Planting Regimes



Geometric patterns (e.g., straight edges or linear planting patterns) due to human *deliberate* human *planting practices*.

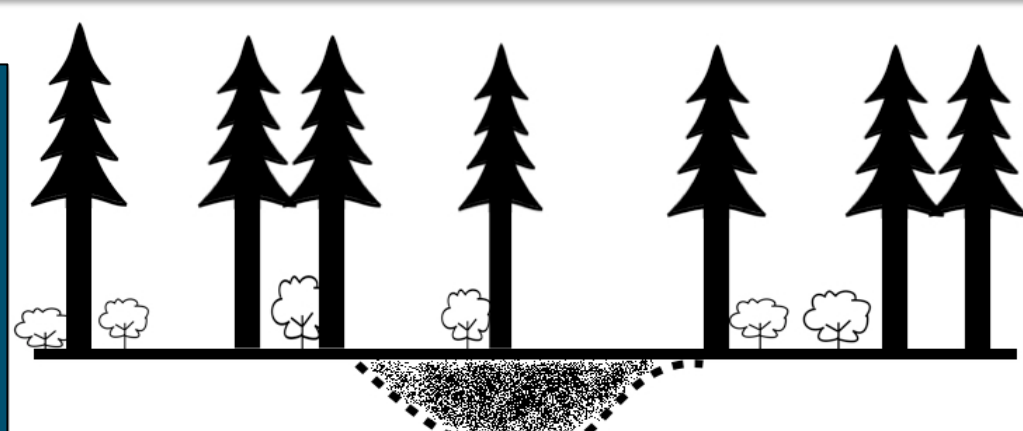
Hemerophobic Effects

Plant Stress



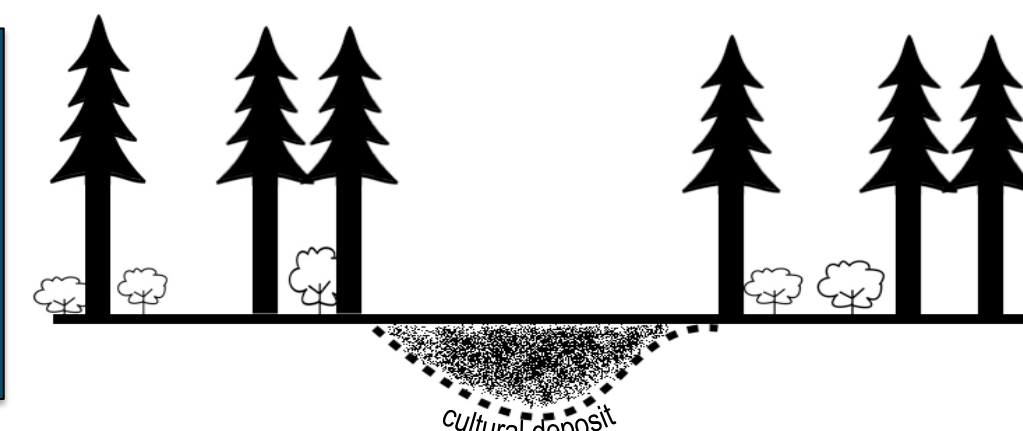
Plants affected by a cultural feature exhibit signs of discoloration, dwarfism, gigantism, premature flowering, and delayed growth.

Lower Sociability



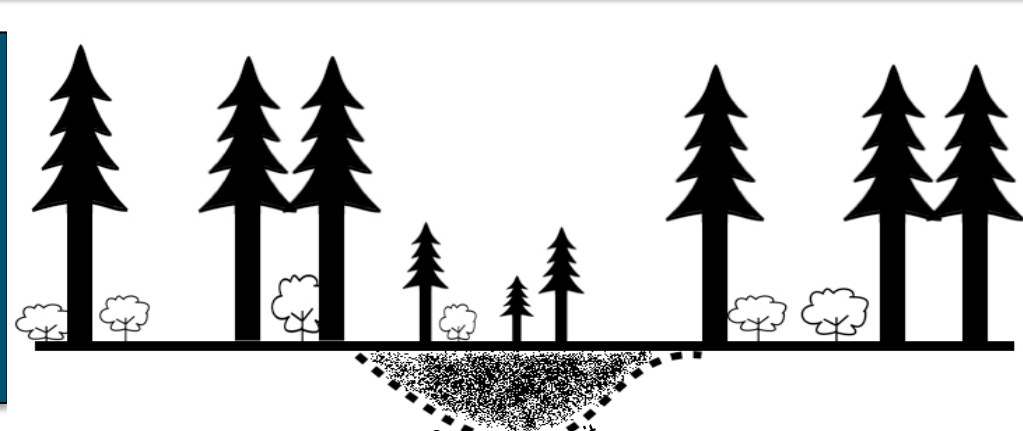
Thinly spaced colonization patterns of spread for a certain species, according to phytosociology's 5-tiered scale of sociability

Anomalous Absence



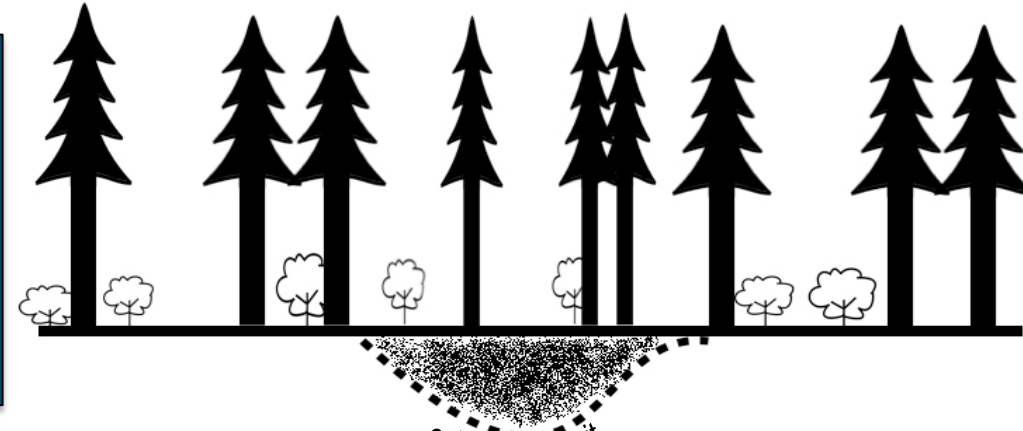
Absence of locally expected species, not simply bare earth.

Lower Vitality



A given species that seems to struggle to establish itself. It is not 'lush', and there are signs of it not completing its life cycle, as expressed by phytosociology's 4-tiered scale of vitality.

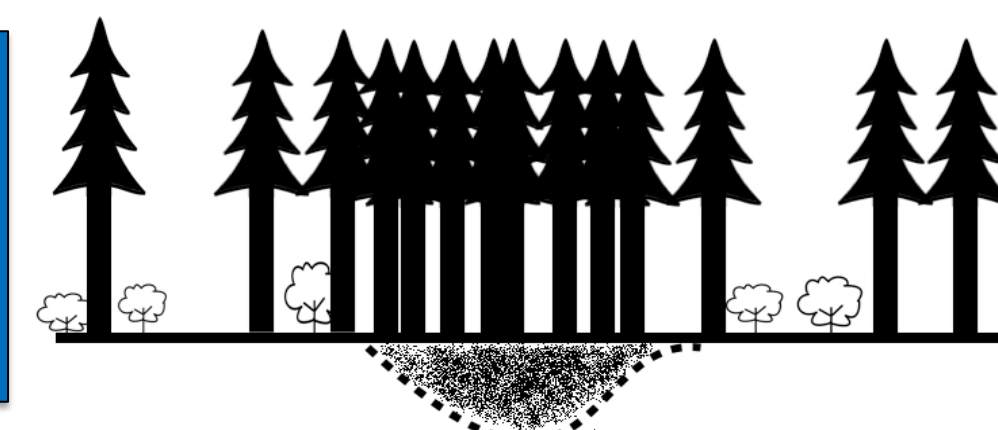
Lower Abundance



Less than expected 'abundance' of an expected species (measured by cover, counts, frequency, and density)

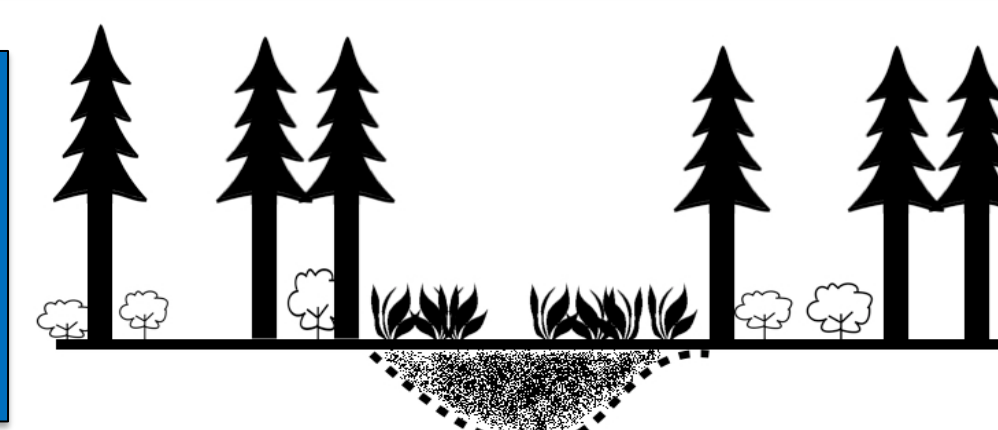
Hemerophilic Effects

Higher Sociability



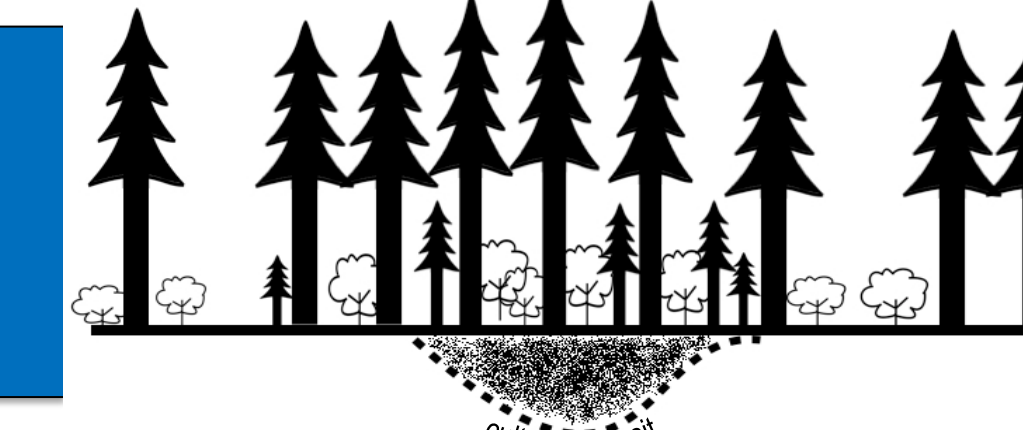
Dense colonization patterns of spread for a certain species, according to phytosociology's 5-tiered scale of sociology.

Concentration of
Apophytes



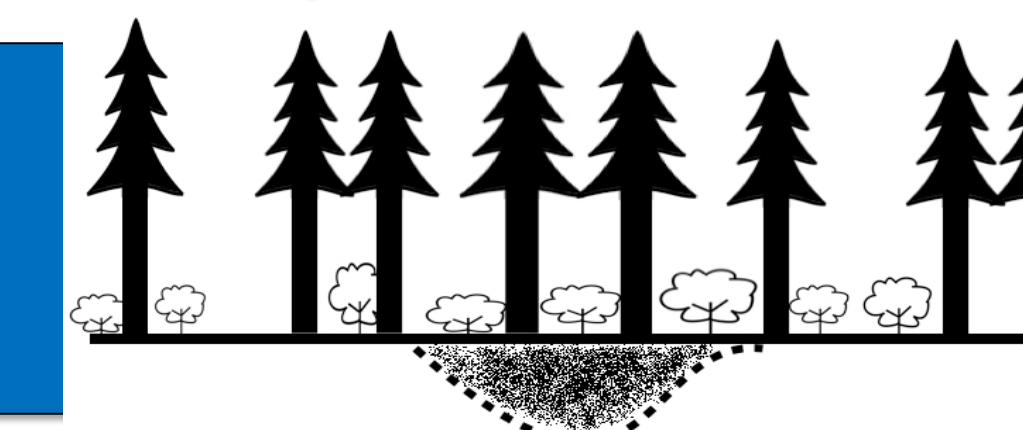
Presence of native species that derive benefit from human manipulation of the environment.

Higher Vitality



Greater 'lushness,' prosperousness, and having many instances of completing its life cycle with fruit/seeds, according to phytosociology's 4-tiered scale of vitality.

Higher Abundance



Higher than expected 'abundance' (measured by cover, counts, frequency, and density).

Glossary

Anthropogenic vegetation: the observable phenomena of direct (first-hand) or indirect (second-hand) changes vegetation's dimensions of archaeological variability resulting (or botanical responses) from the (intentional or unintentional) activities of human agency; such as the form of a species' creation/cultivation; alteration to its form/appearance; change to its formal properties/qualities; and change from its habit of spatial distribution or spatial displacement.

Anthrophyte: a non-native species benefiting from human manipulation of the environment.

Apophyte: A native species benefiting from human manipulation of the environment.

Edaphic: something pertaining to soil conditions.

Extrinsic: the nature of something coming from its surrounding context.

Hemerophilic effects: a condition in plant(s) reflecting a "culture-fearing" reaction

Hemerophobic effects: a condition in plant(s) reflecting a "culture-loving" reaction

Intrinsic: the nature of something originating from innately within itself

Sociability: the 5-scaled phytosociological measure of a species spread or colonization

Synanthrope: an organism which benefits from human manipulation of the environment.

Vitality: the 4-scaled phytosociological measure of a species' success in completing its life cycle

Why care?

In archaeological literature there are diverse and even contradictory uses of "anthropogenic," a word appropriated from environmental studies and a term increasingly used in the last 15 years as a sort of conceptual duct-tape for phenomena between the traditional terms "artifact," "ecofact," and "feature." On mapping the flexible uses of "anthropogenism," I realized its general denotation as "human modification and influence" could mean many things to different archaeologists, carrying different combinations of and degrees of causality, intentionality, modification, and scale. While this diversity exists in the general idea of anthropogenism, many archaeologists view anthropogenic vegetation as simply cultivars or any 'tooled' modification. This poster reconciles the diverse views towards anthropogenism and applies them in a classification system for anthropogenic vegetation, which allows for phenomena that can be innately and contextually related to human activities in the environment. Without which, archaeologists may overlook the data potential of certain anthropogenic phenomena over others.

Bibliography

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Note

"Plants" and "vegetation" are used here in the loose sense, to include organisms in and beyond the kingdom *plantae* (e.g., fungi and lichens).