

Appendix B: Definitions



Allele – A variant (one of two or more forms of a gene) of the DNA sequence at a given locus (location of a gene or DNA Sequence on a chromosome).

Cultivar – A cultivated plant that has been selected and given a unique name because of desired characteristics and when propagated (usually vegetatively) retains those characteristics.

Generation 0 – Seed harvested from remnant prairie tracts that will be used to grow new plants (G1). Generation 0 seeds are considered genetically unaltered by human activity and the collection site should be in a natural state. Generation 0 seed has not been through an intentional selection process and its origin is generally definable by a geographic location from which the seed is collected.

Generation 1 – Seed harvested from fields reconstructed with source-identified Generation 0 seed.

Genetic contamination – Loss of native plant population fitness due to the addition of non-local genes into native populations via pollen, seed or plant material.

Genetic sensitivity – The sensitivity of an individual species to inbreeding, loss of adaptation or out-breeding depression.

Genotype – The genetic makeup of a cell or organism (the allele makeup of an organism).

Germplasm – The hereditary material that is transmitted from one generation to another.

Hard seed – Seeds that remain hard at the end of the prescribed test period because they have not absorbed water due to an impermeable seed coat.

Herbicides – Chemicals that are used to target and kill plant species.

Inbreeding – The breeding of related individuals within an isolated or a small population of plants, sometimes leading to decreased genetic diversity and fitness.

Insecticides – Chemicals that are used to target and kill insects.

Locus – The specific location of a gene or DNA sequence on a chromosome. A variant of the DNA sequence at a given locus is called an allele.

Native Plant Community Restoration or Reconstruction – Re-establishment of a native plant community, such as a prairie, wetland or forest, using seeds, seedlings, cuttings, or transplants on a site. Reconstructions are typically defined as sites with little/no actively growing remnant vegetation. Restorations augment degraded remnants by replacing missing species and/or increasing species abundance. The aim of restoration or reconstruction projects is to replicate ecologically complete historic native plant communities; re-establish wildlife and aquatic habitat by returning elements of a site's natural ecological structure and composition; and/or restore ecological components of native forest communities.

Out-breeding depression – When offspring from crosses between individuals from two different plant populations have lower fitness than progeny from crosses between individuals from the same population.

Pesticides – Chemicals that are used to kill living organisms such as fungus, bacteria, insects, plant diseases, slugs, or weeds.

Plant fitness – An individual's contribution of young to later generations, measured by longevity and reproductive success.

Prairie reconstruction – The establishment of prairie species on a site that contains no actively growing remnant vegetation; such as an agricultural field or lawn.

Provenance – The geographic sources where the seeds/plant material naturally originated.

Pure live seed (PLS) – The measurement of the amount of seed that germinates in a standard (14 day) germination test, plus the amount found to be alive from a viability (tz) test. PLS is determined by multiplying the percent germination success by the purity of seed.

Pure seed – Seed exclusive of inert matter and all other seeds not of the kind or variety being considered, as defined by the rules for testing seeds of the Association of Official Seed Analysts.

Remnant – Fragment of a climax plant community that remains from a former period, typically before European settlement.

Resilient Native Plant Communities – Those communities with the ability to absorb or adapt to the effects of climate change or other external forces and continue to function, although possibly in different ways or with a different suite of species than in a prior state. The resilience of a native plant community often depends on the degree of genetic variation that resides within the species which comprise that community.

Seed Transfer Zone – The geographic range in which a given plant population will likely thrive, based on variables such as soils, topography, geology, precipitation, and temperature range.

Selected traits – Traits that are promoted intentionally or in some cases unintentionally, such as height, flower color, form, leaf color, forage quality and leafiness.

Variety – A taxonomic subdivision of a species consisting of naturally occurring or selectively bred populations (usually propagated by seed) or individuals that differ from the remainder of the species in certain minor characteristics.

Wild harvest – Seed that is harvested from remnant native plant communities.

Yellow tag seed – Source-identified seed that is comprised of the least selected germplasm for a species and are considered to be genetically diverse. The location where the material was originally collected from native stands (genetic origin) is indicated on the certification label.