FACT SHEET

Plant Categories

Toronto Master Gardeners

	DESCRIPTION	ECOLOGICAL AND EVOLUTION RELATIONSHIPS
NATIVE	There is no single or simple definition, but time is the key. One way to think about it is that the longer a species persists in the local ecosystem, over many generations (millennia), they evolve: becoming more ecologically integrated and well-adapted to local environmental conditions and patterns	Deep co-evolutionary and ecological relationships exist between these species and other living organisms and the non-living environment. Together, they form an ecological web that adapts, survives and is resilient to stresses and changes. They rely on each other and are the foundation of healthy ecosystems.
NEAR-NATIVE	A species not (or only recently) present in the local ecosystem, but native to a nearby region. It is possible for these species to disperse into the local ecosystem without human intervention. If people are involved in this dispersal, it is called “assisted migration.”	Variable, but likely to be intermediate between the “native” and “introduced” categories. If they have close relatives in the local ecosystem, or were previously present and then excluded (e.g. by a glacier that subsequently melted) then they may integrate faster.
INTRODUCED	A species that is native to a region far from the local ecosystem and arrived relatively recently. These are most often accidentally or deliberately transported to the new location by humans. They are sometimes introduced through non-human activities (e.g. oceanic rafts, migrating animals), but much less often.	Variable, but relationships with other species are often limited and weak. They may be out-of-synch with the seasons and may need extra care to survive, or may spread aggressively in certain conditions. They may become naturalized or invasive or neither and it is very hard to predict which or when.
NATURALIZED	An introduced species that is in the process of integrating into the local ecosystem. They survive on their own, reproducing spontaneously in their niche, but have only been present in the region for decades to a few centuries rather than millennia.	These species may be common in certain conditions (often disturbed sites or adjacent to cultural areas) but they don’t displace native species or disrupt ecosystem health or function. They are beginning to form deeper relationships with other species.
CULTURAL	Species that are used, cultivated and dispersed intentionally by humans; they are functional beyond their aesthetic value (e.g. food, medicine, fiber, dye, building material) and are often represented in art and stories. Some are used locally in their native range, others may be dispersed through trade or alongside human migration.	Typically they require human care and cultivation. Without extra care, these species do not tend to thrive. Beyond their value to humans, they may or may not have relationships with other species; this depends on whether they have a long history in the area or were recently brought there by humans and whether they have close relatives which are native species.
ORNAMENTAL	Species that are grown by people primarily because of their appearance (e.g. the colour, texture or shape of their flowers, leaves or stems) or sometimes other superficial qualities. Often, these are heavily inbred “strains” that are marketed much like the ebb and flow of other cultural fashion trends.	Their function, relationships and genetic variation are often eroded or impaired through the selective breeding process (analogous to “pure bred” dogs.) Still, some can escape cultivation, often reverting to their “wild” form in a few generations. From there, they may become naturalized or invasive or neither.
INVASIVE	Introduced species that spread rapidly and cause harm. The harm may be ecological (displacing native species, using up resources or spreading disease), economic (contaminating crops, damaging buildings, clogging waterways, poisoning livestock) or physical (e.g. harmful thorns, caustic oils.) Removing these species or stopping or slowing their spread is typically very costly and labour intensive.	As they spread, they create large areas of monoculture, leaving little or no room for other species. They often have no predators or parasites and provide little or no nutrition to wildlife. Removing invasive plants may be a never-ending task, but if a use can be found for the removed material, then the plant can become functional as their removal becomes a harvest. Little is known and there is much debate about whether these species can ever become naturalized.
WEED	A subjective and non-scientific term to describe any plant that is undesired in a particular location. This may be due to aesthetics or behaviour (usually over-proliferation). These may be native, naturalized, invasive or cultural plants. Their apparent value may shift depending on the setting and/or different human perspectives.	Variable and context-dependent. In order to understand a plant’s role in a given place, it would be better to assign it to one of the other categories in this list, then examine how it relates to the other species in the area and what function it has. Whether to keep or remove the plant should be based on its ecological function and relationships.

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