

**Summary of Herbicide Characteristics**

Compiled by Michael Van Clef, Ph.D., Stewardship Director, Friends of Hopewell Valley Open Space

Sources: Tu et al. 2001, CDMS 2007

Herbicide Common Name <sup>1</sup>	Recommended Use Grouping <sup>2</sup>	Examples of Trade Names	Target Species	Half-life in Soil (days)	Half-life in Water (days)	Estimated Cost per Gallon	Wildlife Risk Category		Human Risk	
							Birds and Mammals	Aquatic Species	Signal Word <sup>3</sup>	Notes
2,4-D <sup>1</sup>	Infrequent	Navigate, 2,4-D L.V.4 Ester, 2,4-D Amine 4, Aqua-kleen, Barrage	herbaceous broadleaf plants	10	hours to months	\$40 (Weed Ho)	Moderately toxic	Not reported, but may bioaccumulate	Caution or Danger	Inconclusive evidence implicates 2,4-D as a potential endocrine disrupter; Eye and skin irritant
Clopyralid	Infrequent	Reclaim, Curtail, Transline, Stinger, Lontrel	herbaceous broadleaf plants	40	8-40	\$ 410 (Transline)	Practically non-toxic	Low toxicity	Caution or Danger	May cause serious eye damage
Fluazifop-p-Butyl	Limited	Fusilade DX, Fusion, Ornamec, Horizon 2000	grasses	15	stable	\$300 (Fusilade)	Slight toxicity to practically non-toxic	High toxicity	Caution	Eye and nasal irritant - toxic if inhaled
Fosamine	Limited	Krenite S	woody plants, some herbaceous broadleaf plants	8	stable	\$60 (Krenite)	Very slight toxicity	Low toxicity	Caution	Eye and skin irritant
Glyphosate <sup>1</sup>	Typical	Round-Up, Rodeo, Accord, Glypro, Glyphomax, Touchdown	any plant	47	12 days to 10 weeks	\$40 (Accord); \$80 (Rodeo)	Low toxicity	Moderate toxicity <sup>4</sup>	Caution	Eye and skin irritant
Hexazinone	Infrequent	Velpar L	herbaceous broadleaf plants, some grasses & some woody plants	90	3 days to 9 months	\$95 (Velpar)	Low toxicity	Slight toxicity	Danger	May cause serious eye damage
Imazapic	Infrequent	Plateau, Cadre	some grasses, some herbaceous broadleaf plants	120-140	< 8 hours	\$350 (Plateau)	Low toxicity	Moderate toxicity	Caution	Eye and skin irritant
Imazapyr <sup>1</sup>	Limited	Arsenal, Chopper, Stalker, Habitat	any plant	24-141	2 days	\$410 (Arsenal)	Low toxicity	Low toxicity	Caution	Eye and skin irritant

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Picloram	Typical	Tordon K, Tordon 22K, Grazon PC	herbaceous broadleaf plants, woody plants	90	2-3 days	\$120 (Tordon)	Slight toxicity to practically non-toxic	Slight to moderate toxicity	Caution	Eye and skin irritant
Sethoxydim	Limited	Poast, Torpedo, Ultima, Vantage, Conclude	grasses	5	hours in sunlight	\$230 (Poast)	Slight toxicity	Slight toxicity	Warning	Eye and skin irritant
Triclopyr	Typical	Garlon 3A, Garlon 4, Remedy, Pathfinder II, Crossbow	herbaceous broadleaf plants, woody plants	30	4 days	\$130 (Garlon)	Slight toxicity	Slight toxicity	Caution or Danger	Garlon 3A can cause severe eye damage and is labeled "Danger"; Most other formulations are labeled "Caution"

<sup>1</sup> Denotes that some formulations of this herbicide are registered for aquatic applications.

<sup>2</sup> Groupings were based upon risks to humans or wildlife, relative cost compared to other similarly effective products and frequency of use by natural area managers.

<sup>3</sup> Signal Words include "Danger" (highly toxic or highly corrosive), "Warning" (moderately toxic) and "Caution" (slightly toxic or relatively non-toxic). Please note that signal words are assigned to specific formulations and may vary within particular herbicide common names (CDMS 2007).

<sup>4</sup> Glyphosate is essentially non-toxic when using aquatic formulations (e.g., Rodeo with a surfactant registered for aquatic applications).