

# Significant 2003 Hamilton Study Area Plant Records from the Royal Botanical Gardens' Herbarium (HAM)

by Carl Rothfels, Sean Spisani and Jenifer Sylvester

These records are the result of fieldwork by RBG staff, fieldwork by other individuals who then deposited their specimens in HAM, or are from herbarium work by RBG staff on previously collected specimens (re-identifications, etc.).

The following were used when determining whether or not a given species was significant in a given area: Smith 2003 for RBG, Goodban 2004 for Hamilton, Varga et al. 2000 for Halton, and Newmaster et al. 1998 for Ontario. The determination of new sites for Halton is a guess, since Varga et al. give a number of extant sites for each species, but don't list them (if we find a species in Halton, we don't know if it's a new or known site). Records preceded by a "\*" are non-native.

Special thanks to Dr. Barre Hellquist for annotating all our *Potamogeton* specimens. Without his help, we would have been at a loss with this difficult group, and would not have been able to confirm *Potamogeton friesii* or *Potamogeton strictifolius*. Similarly, Stephen Darbyshire generously reviewed and annotated our specimens of *Zizania* and some grasses, and Bill Crins did the same for *Carex* and *Melica*. Finally, Dr. Jim Pringle was again of great assistance with specimen identification, literature searches, and general herbarium matters.

## ACERACEAE

### \* *Acer pseudoplatanus* L. **Sycamore Maple**

New for RBG. This invasive maple was collected along the Brackenbrae Trail (deep within Hendrie Valley – far from any cultivated areas) and in the ravine below the Rock Garden, where it was locally common. It is similarly spreading down the slope below the Woodland Garden (Rothfels 2003). CJR 706; 570, J.L.Sylvester, S.R.Spisani.



Acer pseudoplatanus. Photo courtesy of Royal Botanical Gardens.

## APIACEAE

### \* *Anethum graveolens* L. **Dill**

New for RBG and Hamilton. One plant of this common herb was growing in a waste areas in the Mercer's Glen compost facility. CJR 654, S.R.Spisani, J.L.Sylvester.

### \* *Conium maculatum* L. **Poison Hemlock**

New for RBG and Hamilton. This is the hemlock of Socrates fame. It is common as large plants around the edges and wetter slopes of the Mercer's Glen compost facility. It dies back by mid-summer. CJR 653, J.L.Sylvester, S.R.Spisani.

### \* *Peucedanum ostruthium* (L.) Koch **Masterwort**

New for RBG, Halton, and Ontario. Dean Gugler discovered this species on the south side of Grindstone Creek, beside Creek Side Walk east of the Brackenbrae Trail bridge, in lush vegetation with *Ambrosia trifida* and *Impatiens glandulifera*, etc. At least 12 plants were present, but Dean reports seeing larger numbers in past years. D.Gugler. HAM# 17622. Determined J.S.Pringle.

## ARACEAE

### *Acorus americanus* (Raf.) Raf. **Sweetflag**

Third record for Hamilton. There was one patch on a rich bank of Spencer Creek just north of Hwy 5. G.Lewer, CJR. HAM# 17833.

## ARALIACEAE

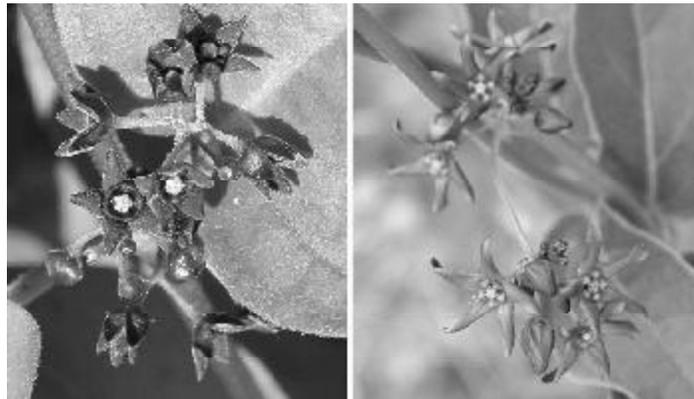
### \* *Hedera helix* L. **English Ivy**

New for RBG, Hamilton, and Ontario. This common ornamental plant is not reported as escaping in Ontario, although it can be a problematic invader in areas farther south. One clump (approximately two feet long) was well established on a mesic forest floor with *Solidago caesia* and *Aralia nudicaulis* along the South Shore Trail by Double Marsh. It was removed as completely as possible. This site is far from any habitation and from any obvious means of introduction. This species, like *Euonymus fortunei*, should be watched for invasive tendencies. CJR 842.

## ASCLEPIADACEAE

### \* *Cynanchum nigrum* (L.) Pers. **Black Swallow-wort**

Pale Swallow-wort (*Cynanchum rossicum*) is often reported as this species, and is locally abundant (it's a noxious invader). *C. nigrum* appears still to be rare in the Hamilton Region, and, at RBG, is mostly confined to



*C. nigrum* on the left; *C. rossicum* on right. Photos courtesy of Stephen Darbyshire.

garden areas where it can be a problematic weed. If anyone sees this species, I'd appreciate a specimen, and they should pull it all out!! CJR 599; 726; 646, S.R.Spisani, J.L.Sylvester.

## ASTERACEAE

### \* *Artemisia annua* L. **Sweet Wormwood**

New for RBG, Hamilton, and Halton. This rare weed (SE1) was common in the Mercer's Glen compost area, and in disturbed waste grown near the Hendrie Valley entrance on the east edge of the Rose Garden (by the Auxillary Garden). It looks a little like the more-common *Artemisia biennis*, but hasclacier, fragrant foliage. CJR 868;977, S.R.Spisani.

### \* *Centaurea X pratensis* Thuill. **Hybrid Knapweed**

New for RBG, second, third, and fourth sites for Hamilton. This is a hybrid between *Centaurea nigra* and *Centaurea jacea*, and is difficult to distinguish from its parents. It is probably widespread in the Hamilton/Halton area. CJR 703;747;915, J.L.Sylvester, S.R.Spisani, et. al.

### *Cirsium discolor* (Muhl. ex Willd.) Spreng. **Field Thistle**

New for Hamilton. A population of this native prairie-associated thistle was growing along the railway near RBG's Rock Chapel Nature Sanctuary, just east of Sydenham Road. CJR 903.

### \* *Coreopsis grandiflora* Hogg ex Sweet **Large-flowered Coreopsis**

Second site for Hamilton. This species was common along the disturbed edge of the CAMCO shipping/receiving lots at Longwood Rd and Hwy 403. There were no other cultivated-style plants in the vicinity; the associates were weeds and pioneering natives. Origin unknown. CJR 956

### *Eupatorium purpureum* L. var. *purpureum* **Sweet Joe-pye-weed**

This provincially rare species (S3) was re-discovered on RBG property. R. Johns collected it in 1963, but it was left off Dr. Jim Pringle's flora (1969). Sean Spisani and Jenifer Sylvester refound it on the talus at Rock Chapel near the railway tracks in the course of surveying our *Morus rubra* populations. Jim Pringle was able to identify their photograph, and subsequent visits demonstrated that there is a large population of over 100 individuals growing beneath *Fraxinus americana*, *Morus rubra*, *Acer saccharum* ssp. *saccharum*, *Acer saccharum* ssp. *nigrum*, *Juglans nigra*, and *Carya ovata*. S.R.Spisani, CJR, K.Oxley. HAM# 17850.



*Cirsium discolor*. Photo courtesy of Royal Botanical Gardens.

### \* *Helianthus tuberosus* L. **Jerusalem Artichoke**

This species was found new for RBG's Hendrie Valley Nature Sanctuary. The record is interesting because it occurred on the Christmas tree barrier at Osprey Marsh, the same location where *Verbena bonariensis* was growing in 2002 (Rothfels 2003; Rothfels 2004), and close to the *Alcea rosea* record from this year. There is something about the Christmas tree barriers that supports the establishment of strange exotics, at least temporarily. CJR 786, S.R.Spisani.

### \* *Iva xanthifolia* Nutt. **Burweed Marsh-elder**

New for RBG, second record for Hamilton. This species has been found once before in Hamilton, around the Aberdeen railyard (Pringle1997). In 2003 there was a single large plant growing in dry waste ground in the Mercer's Glen compost area. CJR 754, S.R.Spisani, J.L.Sylvester.



*Iva xanthifolia*. Photo courtesy of RBG

### \* *Senecio sylvaticus* L. **Woodland Groundsel**

Remove from RBG and potentially from Halton (it is listed as present in Halton, but no estimation of number of records or locations is given.) The RBG specimens, including those from Hendrie Valley in Halton, have all be annotated to *Senecio vulgaris* L.

### \* *Senecio viscosus* L. **Sticky Groundsel**

New for RBG and perhaps the third and fourth records for Hamilton. It looks similar to Common Groundsel (*Senecio vulgaris*) but is, not surprisingly, quite sticky. Previously known from the railyard south of the Desjardins Canal (M. Oldham collection) and from Windermere Basin. We found it this year at the Aberdeen Railyard (fairly common) and as one large robust plant on the disturbed mounds at the Long Valley Brook restoration site. The latter location is strange – presumably the *Senecio* arrived either in the treads of the machinery used in the restoration, or by wind. CJR 861;954, K.Kitching, S.R.Spisani, J.L.Sylvester.

### *Solidago squarrosa* Muhl. ex Nutt. **Stout Goldenrod**

Fifth site for Halton. Along Sixteen Mile Creek about one kilometre west of Lion's Valley Park. P.G.O'Hara HAM# 17748.

### \* *Tanacetum parthenium* (L.) Schultz-Bip. **Feverfew**

New for Hamilton. This species was poorly established (low numbers) in the Mercer's Glen compost area, with other weeds. We found it nearby in Hendrie Valley in 2002 (Rothfels 2003). CJR 734, J.L.Sylvester, S.R.Spisani.

## BETULACEAE

### *Corylus americana* Walter. **American Hazel**

New for Hamilton; second site for Halton. This species was overlooked by Goodban (2003); there are specimens from two Hamilton sites in HAM, including Cootes Paradise and a 1951 record from Sheffield, and this species is listed in Smith 2003 and Pringle 1969. Records from 2003 include one from an oak remnant along Burlington Heights (the High

Level) above Kay Drage Park, and a second record from Sixteen Mile Creek around one kilometre west of Lion's Valley Park. P.G.O'Hara. HAM# 17844; 17792.

## BORAGINACEAE

### \* *Myosotis arvensis* (L.) Hill **Garden Forget-me-not**

New for RBG. This species was first collected from RBG by J. Singfield in 1998, but was misidentified as *M. scorpioides*, perhaps because *M. arvensis* was accidentally omitted from Newmaster et al. 1998. It is a common weed in RBG gardens, including an abundant population in the nursery compound by the boathouse. CJR 607;645, J.L.Sylvester, S.R.Spisani.

### \* *Myosotis discolor* Pers. **Two-coloured Forget-me-not**

Remove from RBG. All specimens of this species have been re-identified as the native *Myosotis verna* Nutt. (Spring Forget-me-not.)

## BRASSICACEAE

### \* *Cardamine impatiens* L. **Cardamine**

Second and third stations for Hamilton. We found this weird rare mustard (SE1) new for Hamilton in 2002 (Rothfels 2003; Rothfels 2004), and found it at two other nearby locations in 2003. The 2002 record was from the boathouse, and the 2003 records came from a steep slope in the wooded ravine west of Old Guelph Road and north of the Arboretum access road, and from a weedy patch in the lawn above the ravine near the Aquatic Nursery. The *Cardamine* is fairly common in both these new sites, in contrast to the three plants found in 2002. CJR 647; 651, J.L.Sylvester, S.R.Spisani.

### \* *Diplotaxis muralis* (L.) DC. **Wall-rocket**

Second through fifth Hamilton records? The *Diplotaxis* species can be difficult to separate, and some of our collections of either species may be intermediate taxa. The best site for them was Windermere Basin, where both were blooming, and mixed together. Petal size was sufficient to separate them, even from a distance, and even when the *D. tenuifolia* were depauperate. Generally, both species seem to be fairly common, with *D. tenuifolia* being slightly more so? In 2003 we collected *D. muralis* from the Carden Plain, Pelee Island, and four locations in Hamilton. CJR 497;774;783;848;912;923; J.Lundholm, E.Oberndorfer, et al.

### \* *Diplotaxis tenuifolia* (L.) DC. **Slender-leaved Wall-rocket**

See *D. muralis*. Collected from Brant County and six locations in Hamilton and Halton. CJR 732;781;785;898, Rob Hepworth, J.L.Sylvester, S.R.Spisani. HAM# 17552;17575.

### *Lepidium virginicum* L. **Virginia Pepper-grass**

We made two collections of this pepper-grass from urban Hamilton in 2003 – one from a downtown lot and one from a crack in the pavement in Westdale. It is listed as native (with four Hamilton records) in Goodban 2004, but certainly behaves like a weed (H.J.Bojars, in a 1963 collection, described the species as being common in “waste places everywhere” in Hamilton!) CJR 562;626, J.L.Sylvester, S.R.Spisani.

### \* *Lobularia maritima* (L.) Desv. **Sweet Alyssum**

Second record for Hamilton. This species was weakly established at the margin of a debris pile in the Mercer's Glen compost facility. CJR 719, S.R.Spisani, J.L.Sylvester.

### \* *Sinapis alba* L. **White Mustard**

New for Hamilton. You never know what you'll find if you explore empty lots in downtown Hamilton .... CJR 563, J.L.Sylvester, S.R.Spisani.

## CAPRIFOLIACEAE

### \* *Lonicera xylosteum* L. **Fly Honeysuckle**

New for RBG. Earlier reports of *Lonicera xylosteum* from RBG were the result of misidentifications of *Lonicera maackii*. However, a concerted look at *Lonicera* this summer did find *L. xylosteum* on our properties, at three locations in Cootes. It is less frequent than *L. maackii*, *L. morrowii*, *L. tatarica*, or *L. X bella*. The honeysuckles in this group (the above, excluding *L. maackii*) are variable, and appear to be hybridizing (hence *Lonicera X bella*, and other hybrids yet to be confirmed). One cannot assume that weedy honeysuckles are *L. tatarica*. CJR 649;657, J.L.Sylvester, S.R.Spisani; HAM# 17358.

## CARYOPHYLLACEAE

### \* *Cerastium pumilum* Curtis **Dwarf Chickweed**

Second record for Hamilton. This small chickweed was common along Old Guelph Road at Mercer's Glen. CJR 463, J.L.Sylvester, S.R.Spisani.

### *Silene antirrhina* L. **Sleepy Catchfly**

Second and third Hamilton records. This species was fairly common in open alvar-like habitats in the Beverly Swamp Conservation Area just north of Safari Road. It was also common along the sandy slopes above the railway tracks at Chedoke Bay. CJR 627;742, J.L.Sylvester, S.R.Spisani.



Top: *Lonicera maackii*  
Middle: *Lonicera morrowii*  
Bottom: *Lonicera xylosteum*  
Photos courtesy of Royal Botanical Gardens.



## CELASTRACEAE

### \* *Celastrus orbiculatus* Thunb. **Oriental Bittersweet**

New for RBG and Hamilton. This species is growing on the fence along the waterfront trail at the east end of Cootes Paradise. The plants are robust, and suspiciously even in their distribution along the fence, so may have been planted. This species is very similar to the native bittersweet (*Celastrus scandens*), but has fruit all along the stems, not just at the end (Voss 1996). It is a problematic invasive in some jurisdictions (Voss 1996), and should be removed from this location. CJR 897.

## CHENOPODIACEAE

### \* *Chenopodium polyspermum* L. **Many-seeded Goosefoot**

New for RBG and Hamilton. A nice little weed, it was growing in the piles of waste clippings, etc, at the Mercer's Glen compost area. CJR 729, S.R.Spisani, J.L.Sylvester.

## CLUSIACEAE

### *Triadenum fraseri* (Spach) Gleason **Marsh St. John's-wort**

Fifth record for Halton. Scattered throughout Fairy Lake Marsh, near Acton. A.Garofalo, K.Cain, B.Jamieson. HAM#17822

## CONVOLVULACEAE

### \* *Ipomoea purpurea* (L.) Roth **Common Morning-glory**

New for RBG and Halton. One plant was growing along the roadside at Sunfish Pond. CJR 793, S.R.Spisani.

## CUCURBITACEAE

### \* *Cucurbita pepo* L. **Pumpkin**

New for RBG and Hamilton. There were several large sprawling plants in the Mercer's Glen compost area. CJR 722, S.R.Spisani, J.L.Sylvester.

## CYPERACEAE

### \* *Carex flacca* Schreb. **Heath Sedge**

Second site for Hamilton. This non-native sedge was growing along a path at the edge of a pine plantation in the Grand River Conservation Authority trail system around two kilometres east of Sheffield. CJR 751, S.R.Spisani, J.L.Sylvester.

### *Carex grisea* Wahlenb. **Narrow-leaved Sedge**

Fifth site for Halton. Locally very common in Hendrie Valley. J.L.Sylvester. HAM# 17414.

### *Carex oligocarpa* Schkuhr ex Willd. **Few-fruited Sedge**

New for Halton. On Tyler Smith's recommendation, we looked for this rare sedge (S2) in Clappison Escarpment Woods east of Hwy 6. There were approximately eight clumps seen along the Bruce Trail for the first ~300 meters east of Hwy 6. It was more common closer to the hwy, becoming scarce farther in (*C. hitchcockiana* becomes more common). Invasives (esp. *Cynanchum*) are present, but not as dominant as at Berry Tract. We only searched the trail. CJR 602, S.R.Spisani, J.L.Sylvester.

### *Cyperus bipartitus* Torr. **River Cyperus**

Fifth site for Hamilton, fifth site for Halton. This inconspicuous little sedge was locally common in the Calcium Pits ESA, and around Princess Point in Cootes Paradise. CJR 857;858; 941, S.R.Spisani, J.L.Sylvester.

### *Eleocharis intermedia* Schult. **Matted Spike-rush**

Third site for Hamilton, third site for Halton. Found at the Calcium pits and along Spencer Creek just north of Hwy 5. CJR 928;943, G.Lewer, S.R.Spisani, J.L.Sylvester.

## ELAEAGNACEAE

### \* *Elaeagnus angustifolia* L. **Russian Olive**

Remove from RBG. The RBG record of *E. angustifolia* (see Rothfels 2003) is the result of a misidentification of *E. umbellata*. CJR 161.

### \* *Elaeagnus umbellata* Thunb. **Russian Olive**

New for RBG. A collection of this species (CJR 161) from Cootes Paradise was incorrectly identified as *E. angustifolia* (Rothfels 2003). We subsequently found *E. umbellata* at three other locations on RBG property, occasionally in natural communities far from disturbance. CJR 161;566;571;953, J.L.Sylvester, S.R. Spisani, M.Roffey, D.Gugler.

## EUPHORBIACEAE

### \* *Mercurialis annua* L. **Herb Mercury**

New for RBG and Hamilton. This species has a rank of SEH ("historical"), meaning that it has not been recorded in Ontario for twenty years or so. It was weakly established (two sprawling plants) at the Mercer's Glen compost area. CJR 731, S.R.Spisani, J.L.Sylvester.

## FABACEAE

### \* *Glycine max* (L.) Merr. **Soya Bean**

New for RBG and Halton. This species is perhaps most notable for having one of the best scientific names ever. It was growing along the edge of the road by Sunfish Pond, and presumably arrived there with seeds that people feed to the birds at that spot. CJR 787, S.R.Spisani.

### \* *Trifolium campestre* Schreb. **Low Hopclover**

New for RBG. This hopclover is easily overlooked (it looks like the common species). We found it twice at RBG, and once in Beverly Swamp. CJR 650;749;972, S.R.Spisani, J.L.Sylvester.

### *Strophostyles helvola* (L.) Ell. **Trailing Wild Bean**

Second site for Hamilton. This was one of the most exciting finds of the year – this rare species (S3) hasn't been seen in Hamilton since it was last collected in 1900! It was growing along the edge of Carroll's Bay near the Desjardins Canal. P.G.O'Hara. HAM# 17729.

## FAGACEAE

### *Quercus ellipsoidalis* E. Hill **Hill's Oak**

Fourth site for Hamilton. Albert found this rare oak near Copetown. A.Garofalo. HAM# 17796.

## GENTIANACEAE

### *Gentiana andrewsii* Griseb. **Closed Gentian**

Second site for Halton. From immediately east of the Hamilton/Halton border south of Lake Medad. Albert Garofalo, Kelly Cain, Brian Jamieson. HAM#17866.

## IRIDACEAE

### *Iris virginica* L. **Southern Blue-flag**

Third site for Hamilton. Paul found this iris at the edge of Carroll's Bay near the Desjardins Canal. P.G.O'Hara. HAM# 17848.

## LAMIACEAE

### \* *Ballota nigra* L. ssp. *nigra* **Black Horehound**

New for RBG and Hamilton. This species has a rank of SEH ("historical"), meaning that it has not been recorded in Ontario for twenty years or so. It was growing along the waterfront trail at the west end of Cootes Paradise. Determined by J.S.Pringle. CJR 716, S.R.Spisani.

*Physostegia virginiana* (L.) Benth. ssp. *virginiana* **Obedient Plant**

New for RBG. J.S.Pringle discovered five stems of this species along a trail in Hendrie Valley. Its presence is odd – it is far from any cultivated areas, and doesn't have any cultivated-style associates at this site, but it is difficult to believe that it has been overlooked here in the past. This record is probably best interpreted as being a non-native occurrence. CJR 936, S.R.Spisani.

*Stachys hispida* Pursh **Rough Hedge-nettle**

New for Halton, third record for Hamilton. This species is locally common in Hendrie Valley (where it was first collected by P.G.O'Hara in 2000), and was also found along the west side of Carroll's Bay. CJR 707, J.L.Sylvester, S.R.Spisani, P.G.O'Hara. HAM# 17842.

LENTIBULARIACEAE

*Utricularia minor* L. **Lesser Bladderwort**

Third site for Halton. From the Calcium Pits ESA, with other aquatics, including *Najas flexilis*. CJR 942, S.R.Spisani, J.L.Sylvester.

NAJADACEAE

*Najas flexilis* (Willd.) Rost. & W. Schmidt **Slender Najas**

Third site for Halton. From the Calcium Pits ESA, with other aquatics, including *Utricularia minor*. CJR 944, J.L.Sylvester, S.R.Spisani.

OLEACEAE

\* *Syringa pekinense* Rupr. **Pekin Tree Lilac**

New for RBG, Hamilton, and Ontario. This tree lilac is abundant in a weedy forest by the northeast corner of Churchill Park. Both large trees and small saplings (suckers) are common, and the larger individuals flowered and fruited. We need to investigate this area and the potential sources of introduction of this species. CJR 662;911, S.R.Spisani. Determined J.S.Pringle.

ONAGRACEAE

\* *Gaura longiflora* Spach **Large-flowered Gaura**

New for RBG and Hamilton. Several plants growing in the Mercer's Glen compost area. CJR 834;957, J.Lundholm.

OROBANCHACEAE

*Orobanche americana* (L.) Wallr. **One-flowered Cancer-root**

Second record for Halton. Over 50 stems seen on Joshua Creek upstream of Ford Drive. A.Garofalo et al. HAM#17877

PAPAVERACEAE

\* *Papaver somniferum* L. **Opium Poppy**

New for RBG. Several plants growing in the Mercer's Glen compost area. CJR 728, J.L.Sylvester, S.R.Spisani.

POACEAE

\* *Agrostis capillaris* L. **Colonial Bent Grass**

New for Halton. This non-native grass was common with native associates

in a rich ravine forest in Sassafras Woods. Is this an invasive species to watch? CJR 528, M.J.Thompson, et al. Determined CJR, J.S.Pringle.

\* *Apera interrupta* (L.) P. Beauv. **Interrupted Wind Grass**

New for Hamilton. This minuscule grass was abundant on compacted gravel edges at the west end of Kay Drage Park. There is a slight possibility that it is *Apera spica-venti* instead of *A. interrupta*, but it fits the latter species more closely. CJR 613.

\* *Digitaria ischaemum* (Schreb. ex Schwein.) Schreb. ex Muhl. **Small Crabgrass**

New for RBG. Likely overlooked due to its similarity to its larger cousin – *D. sanguinalis*. CJR 844;859, J.Lundholm.

*Echinochloa muricata* (Michx.) Fern. **Prickly Barnyard Grass**

Remove from RBG, and down to three sites for Hamilton. All specimens of this species have been reidentified as *Echinochloa microstachya* (Wiegand) Rydb. (Small-spiked Barnyard Grass.)

*Elymus villosus* Muhl. ex Willd. **Slender Wild Rye**

New for RBG, second and third records for Hamilton. This species was common in the lower Red Hill Creek Valley, and on the talus on the west side of Rock Chapel, where it was first found by Sean Spisani. CJR 904; S.R.Spisani. HAM# 17620.

*Eragrostis pectinacea* (Michx.) Nees ex Steud. var. *pectinaceae* **Tufted Love Grass**

New for RBG, third and fourth Hamilton sites. This species has been overlooked – we collected it twice in Cootes and once in the Upper Tiffany Creek ESA, as well as seeing it in downtown Hamilton (by B&T's, coincidentally). CJR 873; 975.

\* *Miscanthus sinensis* Anderss. **Japanese Plume Grass**

New for RBG and Hamilton. Confirmed by S.Darbyshire. A large clump of this species was growing on the west side of Long Pond, in an inaccessible spot far from any cultivated areas. Perhaps it came in via Hwy 403 somehow? CJR 909.

\* *Phalaris canariensis* L. **Canary Reed Grass**

New for Halton. This species was growing in Hendrie Park near the Auxillary Garden, where it was an escape from the bird feeder. CJR 708, S.R.Spisani, J.L.Sylvester.

\* *Poa bulbosa* L. **Bulbous Spear Grass**

Second and third Hamilton sites (first in Rothfels 2003). We collected this species twice in Hamilton (RBG arboretum and Dundas Valley) and three times in Halton. CJR 504;505;515;519;560, J.L.Sylvester, S.R.Spisani.

\* *Setaria faberi* R.A.W. Herm. **Giant Foxtail**

New for RBG. Growing in the Mercer's Glen compost area. The hairy upper surface of the leaves distinguish this species from the more common foxtails. CJR 760, S.R.Spisani, J.L.Sylvester.



*Elymus villosus*. Photo courtesy of Royal Botanical Gardens.

*Zizania aquatica* L. **Southern Wild-rice**

Add to RBG, Hamilton, and Halton. Stephen Darbyshire generously checked over our *Zizania* specimens and determined that they were mostly *Zizania palustris* L. (Northern Wild-rice), but did find one *Zizania aquatica* specimen from Cootes and another from Hendrie Valley. So we have both species on RBG properties. *Zizania palustris* is probably introduced from elsewhere in North America, whereas *Z. aquatica* would historically have been common.

POTAMOGETONACEAE

*Potamogeton friesii* Rupr. **Fries' Pondweed**

New for RBG and Halton, needs to be removed from Hamilton. C.B.Hellquist has annotated a previous record of this species from Cootes to a hybrid between *P. zosteriformis* and some other species (probably *P. friesii*). We collected true *P. friesii* from Osprey Marsh in Hendrie Valley. This species is listed as extirpated from the GTA (Halton, Peel, Mississauga, Toronto, York, and Durham) by Varga, so this is a very exciting record! CJR 678, S.R.Spisani. Determined by C.B.Hellquist.

*Potamogeton foliosus* Raf. **Leafy Pondweed**

Third through fifth sites for Hamilton, fourth and fifth sites for Halton. This species seems to be locally common; at least the fruiting individuals outnumber other small pondweeds (*P. berchtoldii*, *P. pusillus*) in my experience. We collected it new from 20-Mile Creek, Beverly Swamp, Spencer Creek north of Hwy 5, Hendrie Valley, and the Calcium Pits. CJR 671;685;696;734;779;918;919, J.L.Sylvester, S.R.Spisani, G.Lewer. Determined by C.B.Hellquist.

*Potamogeton nodosus* Poir. **Knotty Pondweed**

Fourth site for Hamilton. Spencer Creek north of Hwy 5. CJR 920, G.Lewer. Determined by C.B.Hellquist.

*Potamogeton pusillus* L. **Small Pondweed**

Sixth site for Halton. In Pond 3 in Hendrie Valley. CJR 687;688, S.R.Spisani. Determined by C.B.Hellquist.

*Potamogeton strictifolius* A. Bennett **Straight-leaved Pondweed**

New for RBG, Hamilton, and Halton. This species (along with *P. friesii*) is one of the most exciting surprises from our submergent monitoring this year. We found it in Hendrie Valley (Pond 4 and Blackbird Marsh) and Cootes Paradise (Mac Landing and Upper Paradise Marsh Pond). CJR 672;673;686;709;739, J.L.Sylvester, S.R.Spisani. Determined by C.B.Hellquist.

PRIMULACEAE

\* *Anagallis arvensis* L. **Scarlet Pimpernel**

New for RBG. This attractive little weed was growing along Cootes Drive at the Spencer Creek trailhead. CJR 773, J.L.Sylvester, S.R.Spisani.

RANUNCULACEAE

\* *Consolida ajacis* (L.) Schur **Rocket Larkspur**

New for Halton. One plant was growing at the site of a future subdivision (?) on the north edge of Hendrie Valley by the railway tracks, on exposed eroding clay at edge of large cleared area. CJR 904. Determined J.S.Pringle, S.Spisani.

ROSACEAE

*Physocarpus opulifolius* (L.) Maxim. **Ninebark**

Second record for Halton. Collected as "maybe planted" from Fairly Lake Marsh. A.Garofalo et al. HAM#17833.

RUTACEAE

\* *Ptelea trifoliata* L. **Common Hop-tree**

Second Hamilton site. Several trees of this species, which is native in extreme southern Ontario, were growing on the slope above Carroll's Bay just north of the Desjardins Canal. They are presumed to be introduced at this site, which is peculiar in itself. P.G.O'Hara. HAM# 17845.

SAXIFRAGACEAE

\* *Tellima grandiflora* Pursh **Big-flower Tellima**

"New" for RBG, Halton and Ontario. This species is probably not worthy of being "officially" added to the flora of Ontario as it was only minimally escaped from cultivation. Several patches were growing at the edge of the Woodland Garden with weedy associates (*Poa bulbosa*, *Taraxacum* sp., *Alliaria*), at least 10 metres from their nearest planted location. Still, it's a species to watch. CJR 559.

SCROPHULARIACEAE

\* *Kickxia spuria* (L.) Dumort. **Round-leaved Cancerwort**

New for RBG and Hamilton. This rare little trailing scroph has sticky, hairy stems, and was found around the York Rd. parking area for the North Shore trails. CJR 968, S.R.Spisani.

\* *Verbascum nigrum* L. **Black Mullein**

New for Hamilton. This species is designated as SEH, meaning that it probably hasn't been found in the province for at least 20 years. It is growing along the waterfront trail between the Desjardins Canal and Bayfront Park, where it was first found and identified by D.Gugler. There are at least two clumps, several hundred metres apart. Perhaps it arrived in the seeds used to naturalize this area, or perhaps its mode of introduction has something to do with the adjacent railway yard? CJR 910. Determined J.S.Pringle.



*Kickxia spuria*. Photos courtesy of Royal Botanical Gardens.

\* *Verbascum phoeniceum* L. **Purple Mullein**

Remove from RBG and Hamilton. All specimens of this species have been annotated to *Verbascum blattaria* L. (Moth Mullein). The confusion is due to keys which stress flower colour as the key character, without recognizing that the flowers of *Verbascum blattaria* often turn purplish upon drying (J.S. Pringle, pers. comm.) This is another instance of why it is important to note fresh flower colour on the specimen label when making a collection! If anyone sees *Verbascum* growing wild with purple flowers, they should make a collection....

\* *Verbascum phlomoides* L. **Clasping-leaved Mullein**

New for RBG and Halton. Two stems of this species were growing in a waste area under a conifer at the west end of the Rose Garden area. Not in a cultivated area. CJR 951, J.L.Sylvester, J.S.Pringle.

\* *Veronica filiformis* Sm. **Hair-like Speedwell**

Fourth Hamilton site. This species was abundant in large patches (up to 30m across) in the Ancaster Creek and Sulfur Creek floodplains upstream of the Hamilton/Brantford railtrail. It was with a suite of other invasives (*Lysimachia nummularia*, *Aegopodium*, *Glechoma*, *Geum* cf. *urbanum*, *Salix* sp., *Acer negundo*), and demonstrated strong invasive tendencies. It is definitely a species to watch. CJR 518.

SOLANACEAE

\* *Datura wrightii* Miller **Sacred Jimsonweed**

New for RBG, second and third sites for Hamilton. This is a beautiful *Datura* (albeit with rather rank foliage..). It is fairly common with its smaller cousin in the Mercer's Glen compost area, and was also growing along the railway under the York Blvd overpass. CJR 724;847, J.Lundholm, J.L.Sylvester, S.R.Spisani.

\* *Hyoscyamus albus* L. **White Henbane**

New for RBG, Hamilton and Ontario. We found three plants of this species in the Mercer's Glen compost area. CJR 755, S.R.Spisani, J.L.Sylvester. Determined D.Eveleigh, J.S.Pringle.

\* *Nicandra physalodes* (L.) Gaertn. **Apple-of-Peru**

New for Halton, second site for Hamilton. This species was abundant in the Mercer's Glen compost area, and was also growing in dry waste ground in the west side of the Rose Garden area, near the Auxillary Garden. Previous, unreported, records of *Nicandra* at RBG may have been the result of dispersal by Canada Geese (Pringle 2001). CJR 720;950, J.S.Pringle, J.L.Sylvester, S.R.Spisani.

\* *Nicotiana rustica* L. **Wild Tobacco**

New for RBG and Hamilton. This species was weakly established at the Mercer's Glen compost area. CJR 725, S.R.Spisani, J.L.Sylvester.

\* *Solanum rostratum* Dunal **Prickly Nightshade**

New for RBG and Hamilton. Very prickly – one serious nightshade! One plant, on dry exposed sandy fill in Mercer's Glen compost area. CJR 753, J.L.Sylvester, S.R.Spisani.

URTICACEAE

*Pilea fontana* (Lunnell) Rydb. **Spring Clearweed**

New for RBG. This species is difficult to distinguish from the more common *Pilea pumila* without ripe seeds. It was common in a rich ravine on the north shore of Cootes Paradise. CJR 970, S.R.Spisani.

VERBENACEAE

\* *Verbena bonariensis* L. **Purpletop Vervain**

New for Hamilton, second Ontario record. We found this species new for Ontario last year (Rothfels 2004), on the Christmas tree barriers at Osprey Marsh (Hendrie Valley – Halton Region). This year we found it to be fairly common and well established in the Mercer's Glen compost area. CJR 718, J.L.Sylvester, S.R.Spisani.

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Sean Spisani and Jenifer Sylvester collecting a *Nicandra* specimen.