



**American Weeds in British Gardens**



# American Weeds

in

*British Gardens*

An initial exploration  
by Julian Campbell  
([bluegrasswoodland.com](http://bluegrasswoodland.com))

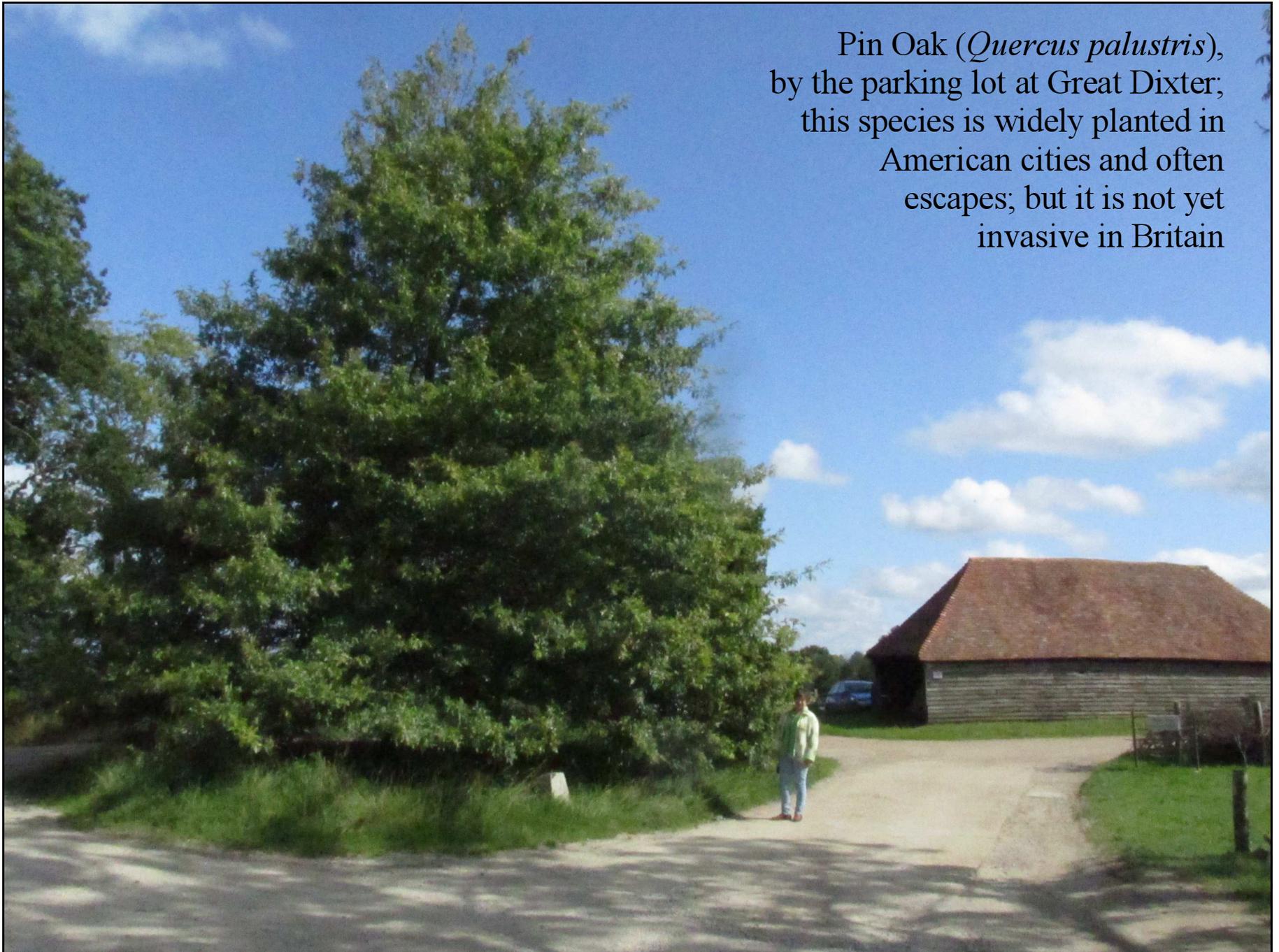
Great Dixter, Sussex (Sep 2015):  
rebuilt from two older houses  
in 1910-12; family home of  
gardener and gardening writer  
Christopher Lloyd  
(1921-2006)



Horticulture has played a significant role within British Imperialism. As well as the promotion of vast agricultural developments (and enslavements) around the globe, with many colonies producing crops of great value to Europe, there was a profoundly selfish interest in acquiring ornamental plants for gardens at home. Starting with John Smith (in Virginia) and the John Tradescants (father & son) during the early 17th Century, many agents of the aristocracy introduced plants from the American colonies to English gardens. These initial efforts blossomed into something of a social movement, at least amongst the gentry, who strived to build (and boast) diverse living collections of spectacular or curious plants. As the decades and centuries went by, several species became widely grown. Some of them even became “common”—in the sense of overall abundance and in the particular sense of widespread use by the working classes. One of my grandmothers implied the latter sense (albeit benignly) when referring to the ordinary goldenrod, *Solidago canadensis*. Another American plant abhorred by her was the staghorn sumac, *Rhus typhina*.

I have become interested during recent years in the extent to which plants from eastern North America have become used in European gardens, at least in Britain (land of my birth). Which species have become most favored or most common? What features of the plants influenced their spread and acceptance? What degree of artificial selection or breeding or genetic engineering has taken place? Which have become excessively weedy in gardens or even invasive across the countryside? And, among more weedy species, how have British tastes and practices dealt with these plants in gardens—letting them run wild or mounting vigorous eradication? This document is an initial survey of the situation, based mostly on subjective personal impressions, a little feedback from horticultural friends or relatives, and an attempt to glean information from websites, especially that of the Royal Horticultural Society. For future improvements, I should stop weeding and spend a lot more time in libraries looking at old botanical and horticultural books and magazines—where the historical details are documented.

Pin Oak (*Quercus palustris*),  
by the parking lot at Great Dixter;  
this species is widely planted in  
American cities and often  
escapes; but it is not yet  
invasive in Britain



The Royal Horticultural Society (RHS), on their website (“Find a Plant”), lists a massive diversity of species, hybrids and cultivars as potentially available within Britain. The exact number is hidden, but it appears to be at least 100,000. One can search by family, genus, species, hybrid or cultivar name. Lists can be alphabetical or ranked according to their “recommended” status. Plants at the top of “recommended” lists are provided with photographs, usually for 1-10% of the entries. However, there is no explanation of how this status is defined. Presumably, there is an hidden code that indicates the degree of acceptance for commercial horticulture within Britain. The Award of Garden Merit (AGM) is the principle award made to garden plants by the Society after a period of assessment by the appropriate committees of the Society. Plants with this award usually rank near the top of their “recommended” listings, but form less than 1% of the entries. There is little or no correlation between this rank and the number of suppliers that the website indicates for each plant.

To outsiders, that is over 99.99% of the human population, it is virtually impossible to determine how “cultivars” are described, registered and recognized among professional horticulturalists. Cultivars are generally claimed to be artificial selections that are distinct from others and stable when propagated, although this is generally impossible from seed. How are these conditions assessed? Theoretically, DNA-sequencing can provide a definitive means to identify unique genetic composition. But few cultivars seem to have been objectively analyzed in this way. There is an official “International Union for the Protection of New Varieties of Plants”, based in Geneva, but the “Plant Variety Database” in their website requires an account to view. They have adopted an “International Code of Nomenclature for Cultivated Plants”. This code employs another organization—“International Society for Horticultural Science”—to appoint and monitor “International Cultivation Registration Authorities” that deal with different groups of plants. The ISHS website lists ICRAs by genus, but many genera do not have assignments, and most ICRAs do not describe cultivars in detail. Sounds difficult, doesn't it?



Plants from eastern North America at Dixter: left, *Oenothera glazioviana*, a cultigen derived from hybridization of the southeastern species, *O. grandiflora*, and the Californian species, *O. elata*; right, white cultivar of *Phlox paniculata* (center) and *Helianthus* cf. *pauciflorus* (upper).

It is interesting to review which herbaceous plants from the eastern half of North America have been given an Award of Garden Merit by the RHS in their “ornamental” category [as of 31 Dec 2015]. Genera with most awards, with at least four including entries for different cultivars, are as follows: *Phlox* with 46 (35 for cultivars of *P. paniculata*); asters (*Symphyotrichum*) with 18; coneflowers (*Rudbeckia*) with ten; sunflowers (*Helianthus*) with eight; bergamots (*Monarda*) with six; goldenrods (*Solidago*) with four; tickseeds (*Coreopsis*) with four (mostly *C. verticillata*); ox-eyes (*Heliopsis*) with four (all “var. *scabra*”), and *Yucca* with four. One should also note *Helenium* with 13 awards, although these are all for cultivars derived at least in part from the western species, *H. bigelovii*, as well as from the more widespread *H. autumnale*. And the alum-roots (*Heuchera*) have had nine awards, although perhaps only for cultivars from western species. Most of these 100 plus award-winning plants are from grasslands (“prairies” or “barrens”), woodland edges and other open sunny habitats. But several popular plants are from somewhat damp lowlands or swales, often with thin woods rather than full sun (such as *Helenium autumnale*, *Heliopsis helianthoides*, *Phlox paniculata*, *Rudbeckia laciniata*, *Solidago rugosa*, *Symphyotrichum cordifolium*). The only plants that are closely associated with rocky sites in the wild are *Heuchera* and *Yucca*. Curiously, despite the fact that several North American grasses are grown in Britain, none have received awards.

Minor award-winning or recommended plants of sunny places in eastern North America, with less than four awards per genus, include: *Allium cernuum*, *Anaphalis margaritacea*, *Baptisia australis*\*, *Echinacea purpurea*, *Eupatorium capillifolium*, *Eutrochium fistulosum*\* (= *Eupatorium f.*), *Glandularia canadensis* (= *Verbena c.*), *Hibiscus moscheutos*\*, *Lobelia cardinalis*\*, *Lysimachia ciliata*\*, *Oenothera macrocarpa*, *Physostegia virginiana*\* (sensu lato), *Pontederia cordata*\*, *Silphium perfoliatum*\*, *Spiranthes odorata*\* and *Veronicastrum virginicum*. Again, several of these are from relatively damp habitats (as indicated above by asterisks\*). Only two are from distinctly rocky habitats—the *Allium* and *Oenothera*.



*Rudbeckia hirta* “Cappuccino” (left) and “Maya” (right)—are these genetically engineered?

Left from <http://i.parkseed.com/images/xxl/51650-pk-p1.jpg>

Right, <http://www.swallowtailgardenseeds.com/assets/rudbeckia-maya-black-eyed-susan-seeds-pop-up.jpg>

Plants typical of deeper shade have also received awards, but, perhaps because they are less prone to diversify and form recognized cultivars, the numbers of awards per genus have remained low. Such genera (each with less than four awards) include *Aruncus*, *Aquilegia*, *Cypripedium*\*, *Dodecatheon*, *Gaultheria*, *Maianthemum*, *Mertensia*\*, *Sanguinaria*, *Tiarella*, *Trillium*, *Uvularia* and *Viola*\*. Many woody species have also gotten awarded: especially arbor-vitae (*Thuja occidentalis*\*, 10 with cultivars), hemlock (*Tsuga canadensis*, 4 with cultivars), and maples (*Acer negundo*\*, *A. rubrum*\*, 2 each with cultivars). Other trees, shrubs or vines, with fewer than four awards per genus, include *Aesculus*, *Amelanchier*, *Campsis*\*, *Catalpa*\*, *Cercis*, *Cornus*, *Crataegus*, *Fothergilla*\*, *Halesia*, *Hydrangea*, *Itea*\*, *Juglans*, *Kalmia*, *Leiophyllum*, *Leucothoe*, *Liquidambar*\*, *Liriodendron*, *Magnolia*, *Nyssa*, *Physocarpus*, *Pinus (strobis)*, *Platanus*\* (hybrid), *Populus*\* (hybrid), *Ptelea*, *Quercus (coccinea, rubra, palustris)*\*, *Rhododendron*, *Rhus*, *Rosa*, *Salix*\* and *Sambucus*\*. Again, several of these are typical of relatively damp, riparian or swampy habitats (as indicated by asterisks\*). Fewer are largely restricted to dry or rocky habitats—notably the *Aquilegia*, *Dodecatheon*, *Gaultheria*, *Kalmia* and *Leiophyllum* (to a lesser extent, the *Cercis* and *Physocarpus*).

A more commercial organization based in the Netherlands—“Fleuroselect: The International Organisation for the Ornamental Plants Industry”—also confers awards and then promotes these plants as a trade association. However, their awards for North American plants are concentrated on annuals such as *Rudbeckia hirta*. They have established rules among members for sharing of patented material; “...innovative cultivars are protected by the membership from reproduction by a gentleman’s agreement amongst the members... a yearly campaign against illegal propagation is held across Europe to inform and control growers.” Although not clearly stated, it is possible that some of their plants are ‘genetically modified organisms’ that have involved direct splicing of DNA, rather than traditional breeding.



Some of the “Promise” line of cultivars in *Phlox drummondii*, created by PanAmerican Seed [images from [http://www.panamseed.com/plant\\_info.aspx?phid=049203227003332](http://www.panamseed.com/plant_info.aspx?phid=049203227003332) etc.]. See also: <http://www.chicagonow.com/chicago-garden/2011/02/can-you-trust-burpee-seeds/>.

## Has Genetic Engineering been Applied?

The general ambition of Fleuroselect as a trade association founded in 1970 is obvious, but do they now hold any secrets concerning GMOs (genetically modified organisms)? Their division for legal support of “Plant Variety Protection” was established in 1998, as biotechnology was becoming a widespread component of the horticultural industry. Although there is no published evidence of GMOs among the plants promoted by Fleuroselect, it is suspicious that this organization does not mention GMOs at all on their website or in associated literature. Neither does their “Home Garden Association”—a subsidiary that infiltrates the consciousness of homeowners. The RHS also refuses completely to mention GMOs in their materials. There is a curious dichotomy among recent scientific reviews of GMOs as ornamental plants. On the one hand, some papers note that GMOs have rarely become commercially developed, partly due to regulatory hurdles (for example, Chandler & Sanchez 2012, *Plant Biotechnology Journal* 10: 891-903). On the other hand, some papers note the great potential of GMOs for horticulture, and appear to advance that cause (for example, Lütken et al. 2012, *Plant Cell Reports*, 31: 1141-1157).

Are some of the recently awarded plants by Fleuroselect GMOs? I’m just saying—“something’s going on...” (to quote Donald Trump). For example, several of the extraordinary new cultivars in *Rudbeckia hirta* just look too artificial to be well-bred. About “Cappuccino”, Fleuroselect even states: “Since it is also programmable, this variety is bound to be embraced by the grower market.” And the great profusion of colors in *Phlox drummondii*—an annual originating in Texas—is unbelievable, especially in the “Promise” line of cultivars produced by the PanAmerican Seed company. The “Safe Seed Pledge” of the Council for Responsible Genetics has been signed by over 150 seed companies in the U.S.A., but not PanAmerican, only four in the United Kingdom, and only one in The Netherlands.



At Dixter again:  
*Cornus alba / sericea* (upper left)  
*Rudbeckia cf. deamii* (center)  
*Phlox paniculata* (center right)

## Well-behaved or Weedy?

A few species from eastern North America that have been favored in Britain, at least as cultivars or hybrids, are notoriously “weedy” in their native range, with rapid local increase or spread over long distances, especially onto bare, moist, fertile ground. Among herbaceous species, these include some of the asters (especially *Symphyotrichum novi-belgii*), coneflowers (especially *Rudbeckia hirta*, *sensu lato*), sunflowers (especially *Helianthus annuus*), tickseeds (especially *Coreopsis verticillata*), dog-fennel (*Eupatorium capillifolium*), eastern Joe-pye weed (*Eutrochium fistulosum*) and rose vervain (*Glandularia canadensis*).

A deeper investigation of the less widely applauded species available in Britain reveals many other truly rambunctious ruderals, such as some species of milkweed (*Asclepias*), beggar-ticks (*Bidens*), large bindweed (*Calystegia silvatica*), thorn-apple (*Datura stramonium*), poke-weed (*Phytolacca americana*), common old-field goldenrod (*Solidago canadensis*), and common ironweeds (species of *Vernonia*). The RHS website even lists one of the most famous common weeds of all in eastern North America—giant ragweed (*A. trifida*), but I cannot find a current reference to it being actually grown in British gardens. Curiously, the website does not list eastern species of some genera that do have very popular western species. For example, the fleabanes (*Erigeron*), bee-blossoms (*Gaura*) and beard-tongues (*Penstemon*) have some award-winning western species or cultivars but no listings at all from eastern species. The eastern species of these largely western genera tend to have less diversity of features, and generally lack large showy flowers.

Among woody species with awards from RHS, those with at least local weedy behavior at home in North America include boxelder (*Acer negundo*), red maple (*A. rubrum*), trumpet-creeper (*Campsis radicans*), redbud (*Cercis canadensis*), black walnut (*Juglans nigra*),



*Chasmanthium* 'River Mist' won a Gold Medal from the Boskoop Royal Horticulture Society.  
[[www.gardenerdirect.com/buy-plants-online/609/Rare-Finds/Chasmanthium-latifolium-River-Mist-River-Mist-Variegated-Northern-Sea-Oats](http://www.gardenerdirect.com/buy-plants-online/609/Rare-Finds/Chasmanthium-latifolium-River-Mist-River-Mist-Variegated-Northern-Sea-Oats)]

sweetgum (*Liquidambar*), tulip tree or yellow poplar (*Liriodendron*), sycamore (*Platanus occidentalis*), cottonwood (*Populus deltoides*), pin oak (*Quercus palustris*), staghorn sumac (*Rhus typhina*), New England rose (*Rosa virginiana*), sandbar willow (*Salix exigua*) and northern elderberry (*Sambucus racemosa*). Two other weedy trees are widely grown but have not received awards—black locust (*Robinia pseudoacacia*), with over 20 cultivars, and black cherry (*Prunus serotina*), with only one cultivar. These two species have become highly invasive in some regions of central and southern Europe. The northern red oak of North America (*Quercus rubra*) has been also been widely grown in Britain and Europe, and it appears to be spreading into the wild.

American hawthorns have not yet become widely grown in Britain, except perhaps for the award-winning “*Crataegus persimilis Prunifolia*” and “*Crataegus* × *lavalleyi Carrierei*”, which are both poorly understood taxa. *C. viridis* is also grown sometimes, especially ‘Winter King’. The late Peter Sell (Cambridge Botanic Garden) told me he feared deeply the eventual introduction into European hawthorns of genes for asexual reproduction (apomixis). This ability is common among American species but unknown among Europeans.

Although many Eurasian grasses have invaded North America, with or without human help, almost none have invaded in the opposite direction. The saltmarsh cordgrass (*Spartina alternatifolia* and its hybrids) is a notable exception, but its initial introduction to Europe in the 1870s was probably accidental. As already noted, there are few species from eastern North America that are commonly grown in Britain or elsewhere in Europe. River oats (*Chasmanthium latifolium*—often misleadingly named ‘northern sea oats’) is one of the more frequently used grasses, especially its variegated cultivars. Most of the typical prairie grasses have not become generally popular in Europe (Andropogons, Panicums, Sorghastrums and their kind). However, variegated forms of prairie cordgrass (*S. pectinata*) are listed by RHS.

Upper: Northern Joe-Pye Weed  
(*Eutrochium maculatum*)

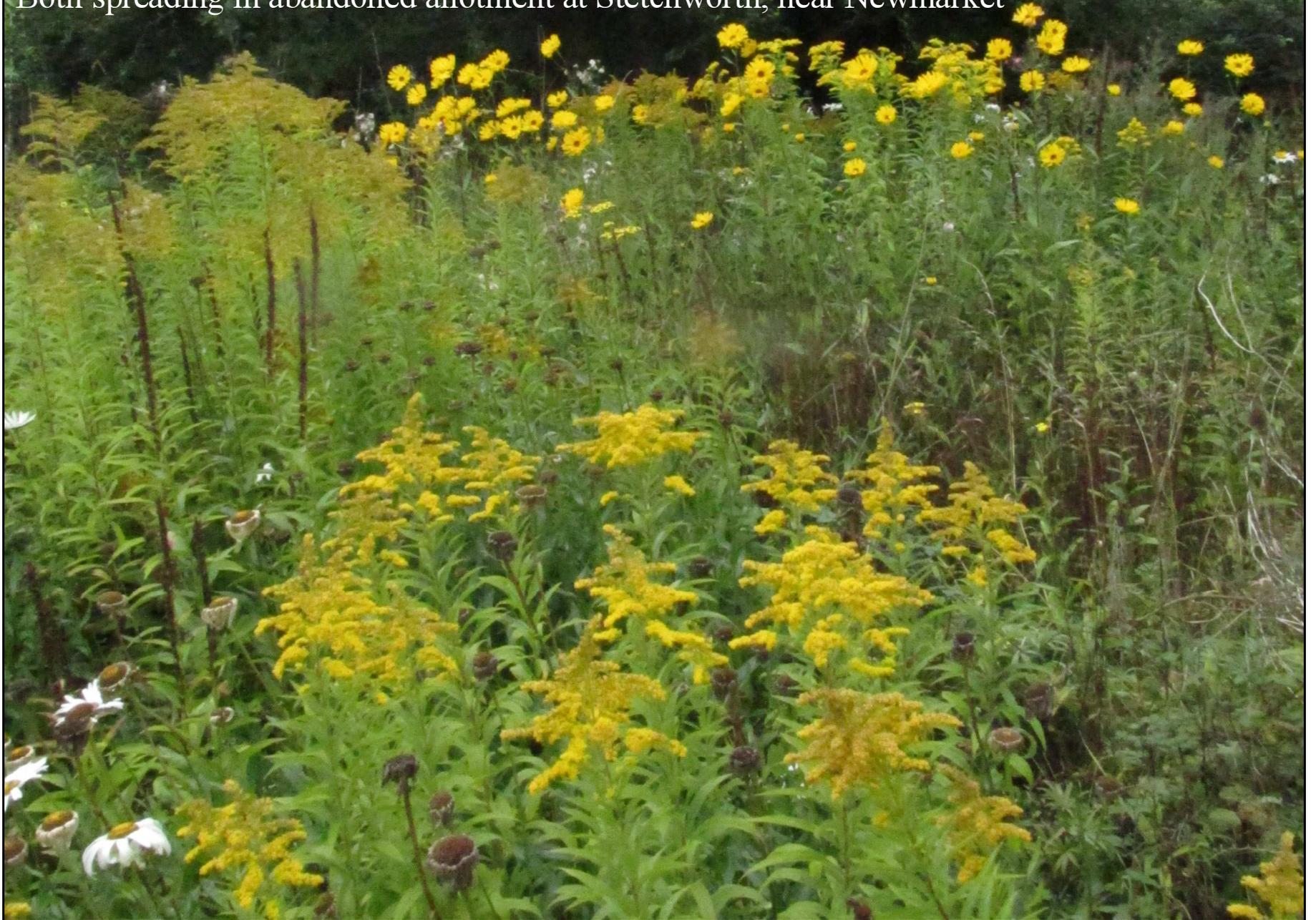


## Invasive Behavior across Britain and Europe?

Invasive alien species within Britain have been listed during recent years by the Centre for Ecology & Hydrology. These include several species from eastern North America that have escaped from gardens or other plantings. The following are “designated as having a negative ecological or human impact” (in “Non-Native Species in Great Britain...”, 2012): *Amelanchier* × *lamarkii*, *Calystegia silvatica*, *Cornus alba* (“sericea”), *Parthenocissus* spp., *Prunus serotina*, *Robinia pseudoacacia*, *Solidago canadensis* (all var. *hargerii* according to John Semple), *Spiraea* × *billardii*, *Symphoricarpos albus* and *Symphotrichum* spp. (“Aster”). Several others are still being evaluated, such as “pearly everlasting” (*Anaphalis margaritacea*), “jimson-weed” (*Datura stramonium*) and “jerusalem-artichoke” (*Helianthus tuberosus*).

Other species with designated negative impact are mostly aquatics often used in water gardens: for example, *Cabomba caroliniana*, *Elodea* spp., *Hydrophyllum ranunculoides*, *Ludwigia* spp., *Myriophyllum aquaticum*, *Pontederia cordata* and *Sagittaria latifolia*. Some of these are now banned from RHS shows or presented with warnings. Broader assessment of invasive plants across Europe is still difficult, based on readily available information. A provisional listing of species with “high impact” has been presented by the European Alien Species Information Network of the European Commission. Most eastern North American species on this list are the same as in Britain. Additional species with frequent horticultural use include boxelder (*Acer negundo*), indigo bushes (*Amorpha* spp.), honey locust (*Gleditsia triacanthos*), *Grindelia squarrosa*, *Lupinus* spp., *Rudbeckia* spp., *Solidago gigantea*, *Spiraea tomentosa*, hemlock (*Tsuga canadensis*) and highbush-blueberry (*Vaccinium corymbosum*). Many horticultural species are listed with “low” or “unknown” impact, needing more assessment. Some of these probably do have high impact in some regions, for example, poke (*Phytolacca americana*) in France (Y. Dumas, 2011, RenDez-Vous Techniques, p. 47-57).

Upper, *Helianthus pauciflorus* (sensu lato); lower, *Solidago canadensis* var. *hageri*  
Both spreading in abandoned allotment at Stetchworth, near Newmarket



## Opposing Examples: Hyacinths and Bluebells

Plants that spread rapidly and widely from seed generally do not persist within dense vegetation, due to obvious competition. But many ‘persisters’ can also be called “weeds” by fastidious gardeners who know what they want. For example, the RHS states: “Although the native English bluebell and the larger Spanish bluebell are often grown in gardens, they can multiply and become a nuisance [with underground runners], requiring control. Spanish bluebells can also hybridise with the native form so are best controlled in gardens close to woodlands where the English bluebell is growing.”

In North America, superficially similar plants to European bluebells (*Hyacinthoides*) are the wild hyacinths (*Camassia*). Some of them were introduced to England in the 19th Century, and there are now dozens of cultivars recognized by the RHS. However, the single eastern species (*C. scilloides*) is much less widely used in horticulture than the western species, even within North America. *C. scilloides* is slow to grow and multiply, mostly from seed and without any runners; the individual bulbs do not appear to divide and spread. It does occasionally persist in odd suburban remnants of the original woodland, as outlined in another essay by this author (“Beargrass in the Bluegrass” at [bluegrasswoodland.com](http://bluegrasswoodland.com); see next page).

*Camassia* is not exactly toxic, but bulbs have to be cooked for days in order for humans to eat them. Bears can dig the bulbs for food, and it is likely that free-ranging hogs eradicated the eastern species from much woodland during early decades of settlement. European bluebells are somewhat toxic due to glycosides in leaves and bulbs, and cattle are occasionally affected (Cutler 2007, in *Livestock* 12: 44-47), but hogs are known to dig and eat the bulbs (Sims et al. 2014, in *Plant Ecology* 215: 1409-1416). True hyacinths from the eastern Mediterranean (*Hyacinthus*) are more toxic, with unusual alkaloids—did herbivory drive such evolution?



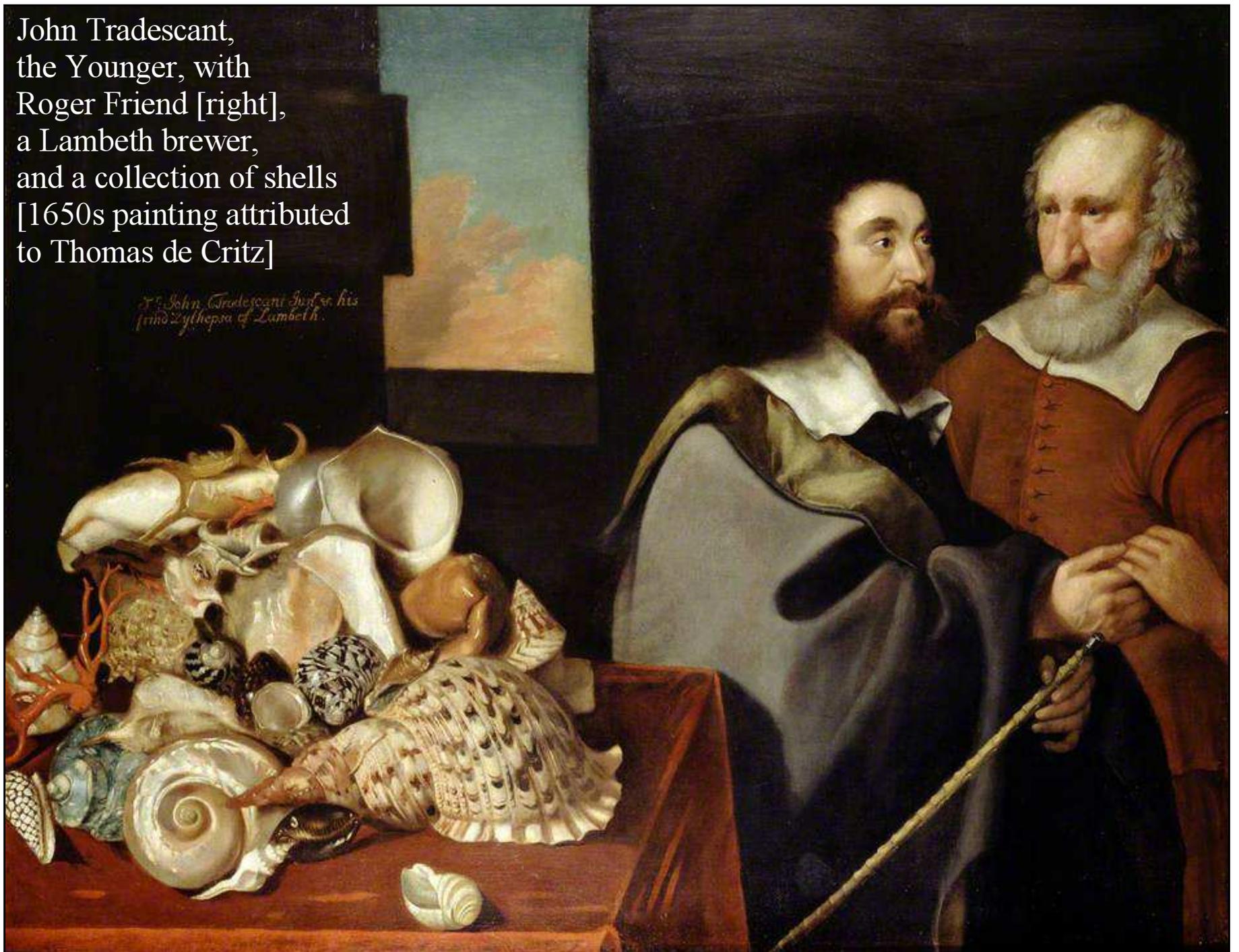
Wild hyacinth (*Camassia scilloides*) in remnant of ancient woodland at the back of Griffith Woods in Harrison County, Kentucky. This is becoming locally dominant on the ground. [[http://www.bluegrasswoodland.com/uploads/Camassia\\_scilloides\\_\\_Beargrass\\_in\\_the\\_Bluegrass\\_.pdf](http://www.bluegrasswoodland.com/uploads/Camassia_scilloides__Beargrass_in_the_Bluegrass_.pdf)]

## Historical Details

To document the history of introductions from North America to Europe in more detail could become an obsessively boring subject, though potentially peppered with human interest and girded up with botanical backbone. There is, of course, a long series of horticultural lists, catalogues, dictionaries and encyclopedias that could be perused, extracted and summarized, if only we had time. I will spare you the details here, dear reader, but refer you instead to a recent book that focusses on associated aesthetic developments and human dramas: “The American Spirit in the English Garden” by Jean Stone (2015, Garden Art Press). This book is an attractive account with many great photos and much fascinating text. The author traces the overall history of introductions, describing some of the most important characters and relevant gardens during the past four centuries. Much of the human drama revolves around the great ambitions that existed in exploration, acquisition, propagation and construction of gardens. “The financial downfall of a number of noble gentlemen was brought about by colossal expenditure on their parks and gardens...[such as the] 5th Duke of Marlborough” (p. 60).

Stone makes an interesting observation about the early wave of introductions, especially the era of Mark Catesby (1682-1749): “Most garden books at the time recommended that ‘American gardens’ should be planted in soil taken from marshes or bogs, mixed with dead leaves and fresh dung, and be buried 3 ft deep. This generalistic advice stemmed from the fact that most plants hunters in North America travelled by the easiest routes, usually along the rivers, so that their collections were consequently gathered from the swampy lands along the river banks” (p. 52). In contrast, she notes later: “Today, British gardens have a fashion for American Prairie Gardens, and Conceptual Gardens are creeping onto the scene, which are frequently designed by American garden designers” (p. 63).

John Tradescant,  
the Younger, with  
Roger Friend [right],  
a Lambeth brewer,  
and a collection of shells  
[1650s painting attributed  
to Thomas de Critz]



Continual problems with nomenclature have haunted technical approaches to horticulture, and Stone does not dwell on these, thankfully. A few examples will illustrate the problems.

- With regard to *Tradescantia* taxonomy, she stated that Edgar Anderson “helped clarify the situation and the official name was changed from *T. virginiana* to *T. andersoniana*” (p. 20). But the Flora of North America (2000) maintained: “Some native species are occasionally cultivated, although most garden plants seem to be hybrids of *T. virginiana* and other species (E. Anderson 1952). They are usually sold as *Tradescantia* × *andersoniana* (an invalid name) followed by a cultivar epithet.”
- In *Parthenocissus quinquefolia* (Virginia Creeper), the RHS lists 12 varieties or cultivars, but no variants are generally recognized in current botanical literature from North America.
- Common names are occasionally muddled or inconsistent: on p. 24, boxelder (*Acer negundo*) is named “Devil’s Walking Stick” [usually applied to *Aralia spinosa*]; also on p. 24, *Dicentra cucullaria* is the name provided for “bleeding heart”, but the photo shows East Asian *D. formosa*.
- Outmoded latin names often persist; for example the correct latin name for Culver’s root is *Veronicastrum virginicum*, but the old name *Lepotandra virginica* is used on p. 60.
- On p. 95 she lists: “*Aster tradescanti*.. fondly named for Saint Michael’s day (29 Sep), and commonly known as Michelmas daisy...” This name was applied to the species that became *Symphyotrichum tradescantii*, an aster of shorelines in New England and adjacent Canada that does not now appear to be introduced in Europe. In Britain, the name instead has generally been applied to plants that are *S. lateriflorum* or other related species. The name Michelmas daisy has been applied to several species of *Aster* and *Symphyotrichum*.



*Tradescantia virginiana*, the first spiderwort to be described, then distributed across Europe.  
[<http://www.floristaxonomy.com/wp-content/uploads/2015/08/tradescantia-virginiana9935.jpg>]

## Overall Trends and Lessons?

The massive invasion of North America by Eurasian species has been obvious for hundreds of years, and it involves many plants with ornamental use, as well as agricultural crops, pastured plants and weeds. Invasion from North America to Eurasia has been generally much less dramatic so far. In Britain, the only obvious widespread and locally abundant horticultural escapes are the common old-field goldenrods, although several others have been widely grown and are probably increasing to a problematic level. On the Continent, several additional species have become widespread and locally abundant, especially in southern regions. The most obvious examples are some trees—boxelder, black cherry and black locust. One might even speculate that these trees are filling ecological niches left vacant after the extinctions that occurred in Europe during glaciations.

In British gardens meanwhile, many other species from eastern North America are now popular, especially medium to tall composites with yellow or pink-purple flowers during mid-summer to autumn. Dense beds of these plants can be impressive on an aesthetic level, and they must promote an abundance of pollinating insects. One of the best examples is the garden at Great Dixter in East Sussex. Apparently, the gardening appropriate for many of these plants has been dubbed the “Arts and Crafts” style—although raised in the midst of it, I had never registered this term until recent googling. This style is reportedly part of a deep philosophical movement. Wikipedia quotes Alan Crawford (2002): “Unlike their counterparts in the United States, most Arts and Crafts practitioners in Britain had strong, slightly incoherent, negative feelings about machinery. They thought of ‘the craftsman’ as free, creative, and working with his hands, ‘the machine’ as soulless, repetitive, and inhuman...” At Dixter, Fergus Garrett has said they are trying to maintain a ‘way of life’ not just an old house and garden. The intensely horticultural life is, unfortunately, dwindling even among the eccentric English.

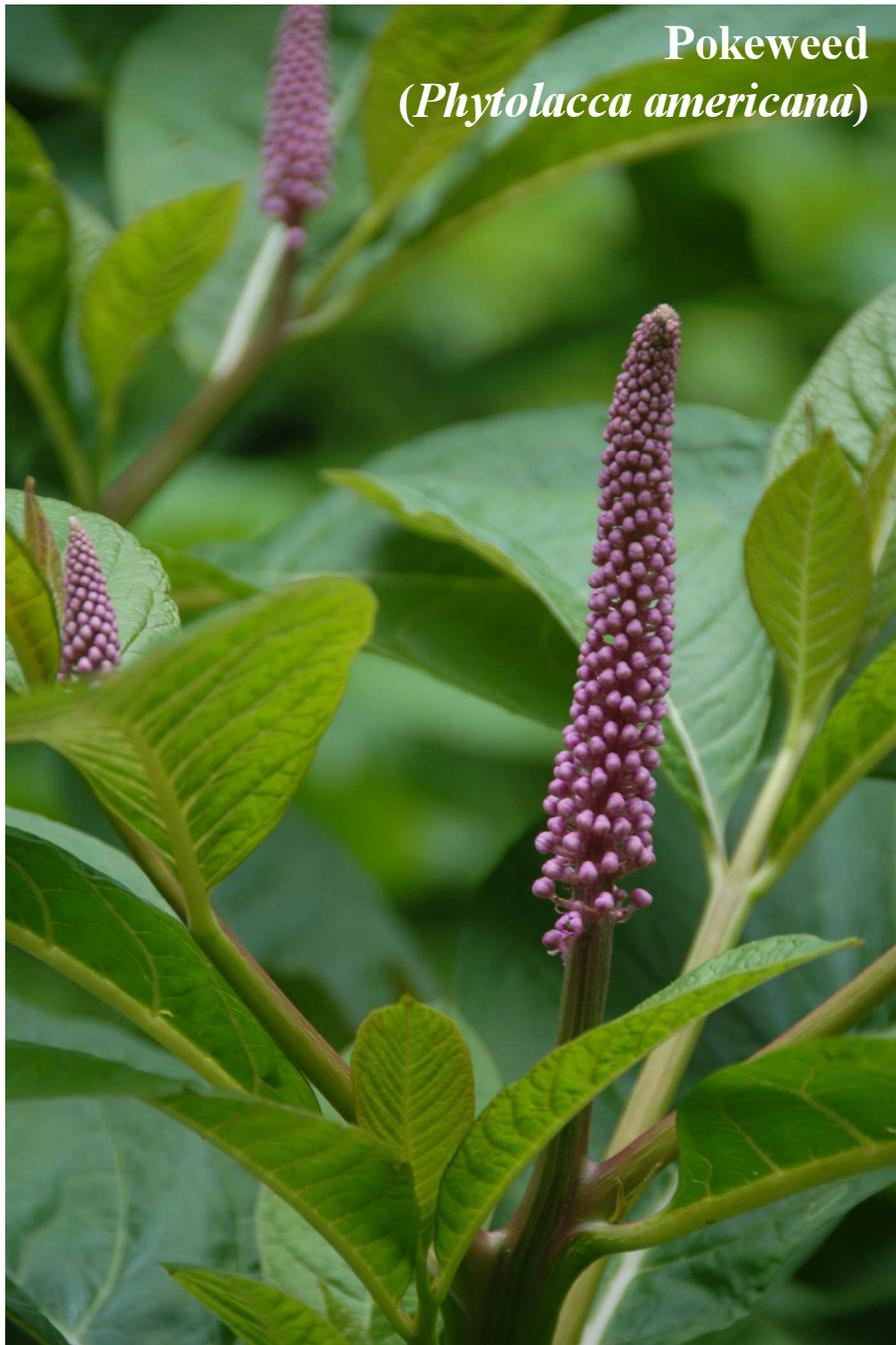
The Taylors at  
Stetchworth



There is continual fascination from comparison of plants on the two continents. We should ponder the special success in some groups of weedy species from America when introduced to European gardens and then, in some cases, escaped into the landscape. For example, can the success of tall perennial composites (= family Asteraceae) be attributed to them filling vacant ecological niches: *Echinacea*, *Eupatorium* / *Eutrochium*, *Helenium*, *Helianthus*, *Heliopsis*, *Rudbeckia*, *Silphium*, *Solidago*, *Symphotrichum*, *Verbesina* and *Vernonia*? Among native European plants, there is a notable dearth of tall perennial composites like these—as opposed to annuals, biennials or rosette plants. It appears that these North American plants, which are often typical of relatively damp habitats back home (with less severe droughts than southern Europe), do find similar receptive habitats in European gardens and sometimes adjacent areas, especially roadsides and abandoned lots on lowlands where grazing animals are excluded. Several non-horticultural American Asteraceae are also increasing as weeds in Europe, such as the ragweeds (*Ambrosia*), beggar-ticks (*Bidens*), and cocklebur (*Xanthium*).

There are of course some native perennial composites in Europe that have relatively tall leafy stems. These include mugworts / wormwoods (*Artemisia*\*), tansies (*Tanacetum*\*), ox-eye daisies (*Leucanthemum*\*), fleabanes (*Pulicaria*), creeping thistles (*Cirsium*), elecampane / samphire (*Inula*\*), scabiouses (*Centaurea*\*), yarrows (*Achillea*\*), sawworts (*Serratula*), hemp agrimony (*Eupatorium cannabinum*\*), goldilocks (*Galatella*), true asters (*Aster*), goldenrod (*Solidago virgaurea*), perennial ragworts (*Senecio*), leopard's banes (*Doronicum*\*), butterburs (*Petasites*\*), purple lettuce (*Prenanthes*, sensu stricto), nippleworts (*Lapsana*), perennial lettuces (*Lactuca*, *Mycelis*), sow-thistles (*Cicerbita*). However, few of these commonly exceed a meter in height. [\*Asterisks indicate species with some horticultural use.]

Almost none of these European composites reach the 2-3+ meters that is often achieved by some North American composites (*Ambrosia*, *Helianthus*, *Lactuca*, *Nabalus*, *Silphium*) or



Pokeweed  
(*Phytolacca americana*)



From [https://upload.wikimedia.org/wikipedia/commons/7/78/Phytolacca\\_americana\\_flower.jpg](https://upload.wikimedia.org/wikipedia/commons/7/78/Phytolacca_americana_flower.jpg); <http://www.hardytopicals.co.uk/forum/viewtopic.php?f=1&t=7990>

other herbaceous eutrophiles (such as *Phytolacca americana* and *Sida hermaphrodita*). Most of these taller European perennials are relatively boring for ornamental use, and although some have ancient medical uses, only a few are really popular in modern gardens. Many of them are strongly aromatic, bitter or otherwise repellent to mammalian herbivores. (The relatively large numbers of annuals, biennials and rosette plants among European composites, as well, have probably been influenced by many millennia of intensive impact from large herbivores.)

In contrast, the paucity of native ‘rosette plants’ in eastern North America is amazing. These are plants with most leaves concentrated in virtual whorls at their base, especially during cooler seasons prior to sending up flowering stems with few or no leaves. Some rosette leaves are more or less flat on the ground, enabling the plant to withstand repeated cutting, grazing or trampling. Within Asteraceae, there are few American plants with a ‘rosette’ tendency: in east-central states, such species may include only *Silphium terebinthinaceum*, *Chrysogonum virginianum*, *Helianthus occidentalis*, *Elephantopus tomentosus*, *Gamochaeta argyrinea*, *Hieracium venosum* and most species of *Krigia*. European rosette plants include many more species, especially in Cardueae (thistles and allies) and Lactuceae (dandelions and allies); the hawkweeds alone (*Hieracium sensu lato*) include dozens of rosette species in Britain. Other genera include *Tussilago*, *Petasites*, *Bellis* and *Leucanthemum*.

It is likely that the longer history of impact from larger herbivores and human clearance in Europe has enhanced the evolution of these rosette plants, some of which are now common weeds in disturbed open land around the Northern Hemisphere. Indeed, the rosette form is associated globally with grazing pressure (Diaz et al. 2006, in *Global Change Biology* 13: 313-341). A few of the American species are grown as ornamentals (especially the low growing *Chrysogonum*). The European rosette plants are mostly avoided in flower-beds, but the common daisy (*Bellis perennis*) is loved in lawns—there is nothing like it from America!



*Chrysogonum virginianum* (“green-and-gold”) in woods of Ohio [photos by Andrew Gibson]. Not a typical rosette plant but often on banks of rough roads, perhaps with more deer browsing.

How does all this impinge upon the gardener, worried or not about horticultural ethics? Truth is—we are all guilty of introducing weeds and then failing to reduce them. Pandora's Box is open; Weeds and Sin are closely related. But, paradoxically, wiser use of livestock in our environments could help to reduce the 'biological pollution' that often seems to continue unabated. In Europe, many of the invasive American plants could be browsed out of areas adjacent to gardens; most are relatively palatable. In America, many of the invasive European plants are typical of grazed or mowed areas; succession of old fields to scrub or woods is often sufficient to greatly reduce them. But there are, of course, exceptions—more about this later...



More *Helianthus*  
cf. *pauciflorus*  
at Stetchworth

I am deeply thankful to several people for support, inspiration, food and lodging, especially my dear cousins from Wittersham, Kent: Gill Duff, who died tragically in 2015, and her sister Sue (right). It was Gill who introduced me to Great Dixter in 2014, and showed the relevance of its unique garden.

Whilst visiting England, I am still generally dependant on my mother, Rachel, in the village of Stetchworth. Her neighbors, Sarah and John Taylor, have a wonderful garden with patches of goldenrod and *Helianthus pauciflorus* (sensu lato); see previous page.

In London, I often stay at the house of my old chums, Joe and Charlotte Earle, somewhere in the East End. Their small garden is perhaps the opposite of Dixter, with no room for American weeds; see back cover.



