



© John Silk

Asclepias syriaca revisited

John Silk enthuses about this fragrant plant, and the migratory Monarch butterflies which depend upon its foliage.

Fig. 1 *Asclepias syriaca*

One of many pleasures to be had from long-time HPS membership is the opportunity to browse at will the pages of past Journals and so often find contributors who have shared our interests in particular plants, gardens and garden practices over the years. Such was the case when, rereading the *In Brief* section of Journal 14, Autumn 1991, I found in Tim Longville's letter from Cumbria an enthusiastic regard for *Asclepias syriaca* under the alliterative title *Sultry and seductive stranger*. *Asclepias* had flowered for him for the first time, from seed.

He dwelt upon the characteristics of the flowers with further inspired prose, describing the colour as 'a subdued but elegant soft pink' (fig. 1). Since the companion photo was to be the last

Journal plant portrait to appear in monochrome this was a necessary attempt to give life to a hue as subtle as indeed it is subdued and soft.

Tim was clearly not alone in his pleasure in the plant, for his horizon was about to be widened by a landslide response to his letter from knowledgeable readers far and

wide, anxious to share their interests in the genus *Asclepias* and its extended family. Some were aware of its use in Victorian gardens, made known through William Robinson's *The English Flower Garden*. One Journal reader, a hybridiser of *Asclepias* species, was to become Tim Longville's correspondent and



© John Silk

Fig. 2 A fifth year clump in the garden



Fig. 3 Female Monarch on Black-eyed Susan

provided much of the material and motive for Tim to turn again to the Journal, in Spring 1993, with an article of descriptive reference that required five pages of text and now-coloured photographs.

Probably all the general information about *A. syriaca* that Mr. Longville wanted to share is now on the Internet, but without the fond and keenly felt first-hand experience he and fellow writers have brought to their articles. Indeed, in the spirit of the author's bewitched description of *syriaca*'s scent as 'sweetly honeyed and insidious' I would add my own appreciation, being reminded of a long-ago summer evening walk to see the Evening Primrose, *Oenothera flava*, unfurl its flowers at dusk, with this fragrance for company.

A stalwart clump of flowering *A. syriaca* can be established in three years from winter-germinated seedlings

grown on in ordinary soil in a well-drained, open border (fig. 2). Some additional shoots from rhizomes may appear at this time up to 30 cm from the main stem cluster. These may simply be cut underground and discarded. There should be no concern about hardiness though there might be misgivings, as Tim Longville experienced, when a mature plant, cut to the ground in late autumn, fails to show new growth until well into May (incidentally allowing some other, earlier flowerers which are 'finished' by then to make use of the spot, *syriaca*'s new spears passing easily through the overgrowth).

A. syriaca is found throughout much of Central and Eastern North America, where it is commonly known as Milkweed, typically growing by roadsides and in waste places. Delayed emergence of this plant may have conferred in evolutionary

time a benefit to the great migratory Monarch butterfly (fig.3). The insect is almost exclusively dependent upon Milkweed from Ontario eastward to the Maritime provinces as the source of rapidly growing, fresh and abundant leaves throughout July and August. The foliage fuels the phenomenal growth of the Monarch caterpillar (figs 4 & 5), which is also being endowed as it eats with toxic cardenolides, part of the plant's own defences that the caterpillar has become adapted to consume without harm. *Syriaca*'s rich nutrients and alkaloids sustain and protect the caterpillars' metamorphoses (fig. 6) into a cohort of adults known as the 'super generation' of Monarch butterflies, which have a great journey ahead of them.

The individual flowers of *syriaca* invite closer inspection. Tim Longville experienced disappointment at having no



Fig. 4 Spot the Monarch larva! (Dead centre)

seedpods by summer's end despite 'the intensity of interest shown in the flower-clusters by a huge number of bees' but, having read about the complexity apparently involved, decided not to try hand-pollination. The more intrepid grower, provisioned perhaps with a pocket magnifier, may see in a single floret from the spherical cluster a tiny slit between each of five 'horns' which curve out of the five petal 'hoods'. The latter are laden with the scent and nectar that especially attract foraging bees and wasps. A clawed foot may slip inadvertently into a slit and when pulled out may have clinging to it a pair of joined pollen sacs or pods. If these continue to cling when another flower is visited, the reverse may occur, leaving the pollen packages abandoned in the new flower's slit.

This sounds improbable, but it happens with enough reliability to achieve some cross-pollination within a colony. A generous amount of pollen will have been placed all at once which helps ensure full fertilisation within the ovary, which will become the pod. In late autumn a mature pod should be brimming with ripe seeds arrayed like scales on a fish, each with a neatly-folded 'parachute' (figs 7, 8 & 9).

Growers wishing to investigate the process or try pollination can burr the tip of a pin on sandpaper and with



Fig. 5 Caterpillars display characteristic warning colours

this tiny hook explore the slits on their flowers in the expectation of withdrawing a pollen package. Depositing the package in another flower may be more challenging! *Asclepias* has other reproductive compensations – the production of rhizomes and its longevity as a hardy plant.

On Prince Edward Island and in Nova Scotia, *A. syriaca* is native but not often met with on the acidic, sandy soils. Liming may have helped our garden-grown plants, creating pH and magnesium levels in the soil more similar to Central Canada. The growth of the clumps has attracted each season at least one impregnated Monarch to lay egg batches in July before dying, and this has continued for years, though far from the butterflies' 'official' routes, being remarkably far north and east (46° 35 N and 62° 25 W) In fact Prince Edward Island is at the extreme north



Fig. 6 Moments before the adult butterfly emerges

of the Monarch's range, and PEI residents are being encouraged to plant Milkweed to increase the habitat which will support them.

The decimated foliage was as nothing given the satisfaction in late August of watching 'our' flawless Monarchs, male and female, setting off southwards over the water, hopefully not too late to join a multitude of

© John Silk



© John Silk



© John Silk



Figs 7, 8 & 9 Mature seed pods

others forming clouds throughout eastern Canada and the United States, then flying together across the continent to Mexico. (Fig.10).

Readers in the UK may believe that the presence of this butterfly in their gardens would be denied them, but at www.ukbutterflies.co.uk they can discover that Monarchs have been officially sighted in Britain for 140 years, the last major immigration of 135 in 1981. Perhaps some of our Monarchs, leaving from so far east, were caught up in one of the great circulatory weather systems carrying winds to the north-east from here and arrived in England. Growing *A. syriaca* may, like a lottery, give you a chance to attract a stray, wherever from. They did at Kew! 🍄

© Wendy Caldwell



Fig.10 Monarchs clustering for warmth on the mountainside oyamel fir branches in the coldest part of winter

John Silk gardens on Prince Edward Island, on the other side of the pond from most readers.

For more information on *Asclepias* and the unique migration of Monarchs see www.monarchlab.org (Minnesota Univ.) and www.thestar.com/archive/Monarch's map to Mexico for 8 Jan 2008. A wonderful experience may be had at BFI IMAX 3D Odeon at a showing of *Flight of the Butterflies* (2012), previewed on youtube.com. Also on youtube search for *Monarch butterfly release Prince Edward Island* to see a Monarch in John's garden.