

# *Yucca filamentosa* somewhere in the swamps of (New) Jersey

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A brief look at a hardy *Yucca* growing at the northern edge of its native range, and comparisons with other species of *Yucca*. Photos by the author.

**Y***ucca filamentosa* L. may be one of the most common yuccas in cultivation, in part, because it is so tolerant of the combination of extreme cold and excessive rain. It is an extraordinarily common species in cultivation throughout much of Canada and the USA. It also happens to be one of the least statuesque species in the genus, with leaves that bend and droop halfway along their length, superficially resembling an enormous sedge, having no obvious above-ground stems, and with stems that form big weedy clumps. Overall, morphologically it more closely resembles the subtropical yuccas of the south-eastern USA than the xeric yuccas of the south-west. *Yucca filamentosa* is also closely related to some of those south-eastern species, such as *Yucca louisianensis* Trel., *Yucca flaccida* Haw., *Yucca arkansana* Trel., and *Yucca constricta* Buckley, as well as the mid-western *Yucca glauca* Nutt. (Clary & Simpson, 1995, Pellmyr et al., 2007).

I stumbled upon a grove of *Yucca filamentosa* at or near what I believe is the northern edge of its native range, in a county park in New Jersey along the main branch of Rancocas Creek. These plants superficially resemble the desert yuccas of the south-west, with short rigid leaves that never seem to bend along their length (Figs. 1–2). In fact, without flower stalks, these plants resemble *Yucca harrimaniae* Trel. and *Yucca neomexicana* Wooton & Standl. Flower stalks, however, resemble those of typical *Y. filamentosa*, being tall and paniculate (Fig. 3). This New Jersey locale had about a hundred rosettes in a confined area that may all have been part of a single interconnected plant. These rosettes were growing in sandy soil – most of New Jersey is a giant sand bar that was under the

ocean until about two-and-a-half million years ago – all within a few hundred metres of a very wide tidal creek, Rancocas Creek, which is connected to the Delaware River just north of Philadelphia.

Distribution maps in *Flora of North America* (Hess & Robbins, 2002) show only one species of *Yucca* in New Jersey, namely *Y. flaccida*, at a disjunct locale that is approximately where the plants herein were photographed. Their distribution maps show only *Y. filamentosa* as far north as southern Maryland. *Flora of North America* (Hess & Robbins, 2002: 434) states, “Perhaps *Yucca flaccida* should be considered a variety of *Y. filamentosa*. The morphological differences are minor. The former has thinner, narrower leaves, and smaller, narrower flowers 4–5cm long, whereas *Y. filamentosa* has thick, rigid leaves and flowers 5–7cm long”. The discordance here is that the plants along Rancocas Creek have thick rigid leaves. Therefore, I suspect the plant or plants along Rancocas Creek genuinely are native, and are at the natural range limit for *Y. filamentosa*, which probably does include the synonym of *Y. flaccida*.



► Fig. 1 A clump of *Y. filamentosa* in New Jersey



▲ Fig. 2 Top view of *Y. filamentosa* clearly showing the short, rigid leaves

▼ Fig. 3 The tall and paniculate (multi-branched) inflorescence of *Y. filamentosa*



▲ Fig. 4 *Yucca filamentosa* seed pods

All the yucca rosettes along Rancocas Creek have the same compact morphology, with short rigid leaves. Remarkably, the two seedlings I grew in Canada from seeds of this plant, at least for now, maintain that morphology with short rigid leaves that do not bend halfway along their length. And my Canadian seedlings are not cultivated in sand, but rather in a pocket of commercial potting soil within a large mound of gravel. Unfortunately, because I tend to visit New Jersey only during December, I just found a dozen seeds (Fig. 4), of which three germinated, but only two survived. Soon I will have to go back in late summer or early autumn for more seeds. Sometimes it is possible to find lovely plants in unlikely places.

I have grown fond of yuccas, in part, because most of them are surprisingly hardy outdoors through our harsh winters in eastern Canada (wet,  $-30^{\circ}\text{C}$ , etc.). I admit that many of these species end up being geophytes in cultivation here. Many of them die back to below-ground parts each winter. The few that stay alive above-ground largely lose their leaves in spring and regrow a new rosette of them. Only a few retain their above-ground leaves in winter (*Y. filamentosa*, *Y. pallida*, *Y. baileyi*, *Y. neomexicana*), while many species grow a new stem and leaves from underground parts each summer. A few of them have very short growing seasons, only resprouting above-ground in July to September, then dying back around October or November. As they get older, some of them resprout earlier each season. My hope, but just a hope, is that some of the arborescent types, such as *Yucca elata*, will eventually keep their above-ground parts all winter here once they establish sufficient underground biomass. *Yucca glauca* is starting to do that. But, alas, for now, because I did not start raising seeds of yuccas until a few years ago, they behave like ornamental bulbs, such as tulips and daffodils. But at least they get more leaves, and longer leaves, each summer.

#### LITERATURE:

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