

Propagation Initiative

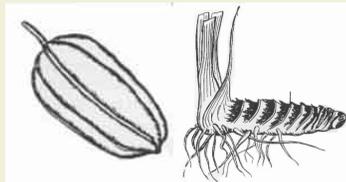
Conservation and Education Program

We are ready for the next phase of our mission to “preserve the native forms of Louisiana iris” and to promote them through public plantings and other activities. GNOIS is launching a unique **Propagation Initiative** as part of our Conservation and Education program. It builds upon the wide variety of colors and forms of the five Louisiana iris species that we have assembled for the **Louisiana Iris Species Preservation Project**. The Propagation Initiative will expand the stock of irises needed to support our plantings and other outreach efforts and do so in a *sustainable* way, without digging irises from the wild.

Over several years, GNOIS has engaged in many projects to plant the species of Louisiana irises in wild, naturalistic, and garden settings. Aside from cultivars, our species iris contributions have come mainly from “rescues” in which irises have been dug from one location and planted in another. Rescues continue to be a valuable activity when seriously endangered irises can be relocated, but rescues are limited to suitable collection sites and the particular plants growing there. Through our new Propagation Initiative, GNOIS can dramatically expand the diversity of irises available for placement where the public can enjoy them and thereby promote the mission of our organization.

The Propagation Initiative requires the assistance of members. It will involve an expansion of activities that have been carried out on a smaller scale at our iris planting in City Park.

We want to introduce you to this new Propagation Initiative and invite your participation.



Conservation Starts With Preservation And Propagation

The Conservation activities of GNOIS rest on the twin pillars of **Preservation** and **Propagation**.

Preservation. To preserve our native iris heritage, the organization obtains, propagates, and protects the many forms of the five Louisiana iris species. Most are part of the Society for Louisiana Irises’ **Species Preservation Project (SPP)** in which GNOIS participates as a major “steward.” The GNOIS website displays a subset of these irises and information on the program at:

<http://www.LouisianaIrisGNOIS.com/SpeciesPreservation/>

Several other stewards participate in the program. Most are in Louisiana, but stewards are also working in such states as Tennessee and Georgia. GNOIS maintains the most extensive species collection in the program.

Although most taxonomists currently recognize only five Louisiana iris species, a surprising range of colors and forms exist within each. GNOIS grows around 150 distinct, naturally-occurring forms of our wild irises.

They exhibit many shades of blue, red, yellow, white, purple, and hard-to-describe “in-between” colors. The GNOIS collection is more extensive than those on the core “preservation list” of the SPP, and it includes natural hybrids between species found in the wild. (GNOIS also grows human-developed hybrid Louisiana irises, which we use for beautification projects, gifts for volunteers, and sales of irises to support the organization.)

Conservation Projects

With this new initiative, GNOIS is adding the propagation component and increasing the organization’s capacity to effectively implement projects. Conservation and Education planting projects will be selected based upon the ability of GNOIS to make a meaningful impact on the natural landscape and public awareness of it. Projects should actively educate the public about the irises and the habitats in which they thrive.



Projects must have reasonable goals. It is not possible to turn back the clock and restore wild irises to the extent that they existed in the past. But restoration is achievable to a degree, and it is worth the effort. On the horizon, coastal restoration projects create “new” lands that may well be a natural habitat for the irises. The **Coastal Protection and Restoration Authority** and other entities are engaged in preserving and restoring forested wetlands, swamps, marshes, and other critical habitat needed for native irises and other plant species to survive. GNOIS is anxious to assist with these efforts. Also, institutions such as **Nicholls State University** and the **University of Louisiana, Lafayette**, have an especial interest in both native irises and coastal restoration. Where possible, GNOIS will work with partners, and it has initiated working relationships with these institutions in support of iris preservation and restoration projects.

How To Propagate Louisiana Irises

Our vision is clear. We will promote conservation goals by nurturing our species iris collection and utilizing it to propagate new irises for use in planting projects. “Propagation” is a task we are well-prepared to pursue at our island nursery, and it requires volunteers to engage in some specific activities and techniques. The irises to be utilized in projects will be developed primarily in two ways: propagation from (1) germination of seeds, and (2) rhizome cuttings and division.

- **Propagation from seed.** Louisiana irises produce seeds prolifically. A seed pod may contain from 20 to 80 seeds, and one bloom stalk might yield one to four or five pods. If half of the seeds collected germinate, a pod from one flower might yield 75 to 100 new plants. If these new irises are themselves harvested for

seeds in subsequent years, the number of available plants can increase exponentially.

Collected Seeds. Seeds can be readily collected from wild populations in early summer. If only one species is growing in a particular area, the offspring will be authentic representatives of that species. Seeds must be collected judiciously so that there is not a significant reduction in the capacity of a stand of irises to reproduce naturally.

Seeds from Controlled Crosses. Seeds can be produced by controlled crosses using the plants in the Species Preservation Project already growing in the GNOIS nursery in City Park. Since all five species and numerous colors and forms are represented – encompassing the approximately 150 different varieties – the total of individual plants at any point is many times that number and increasing each year. It is necessary to cross-pollinate by hand to produce seedlings of a known species, because, given the proximity of the plants in the nursery, bees will carry pollen randomly, and seedlings from the resulting pods will often represent hybrids between species.

On the other hand, if a GNOIS volunteer applies *fulva* pollen to another *fulva* or *giganticaerulea* pollen to a *giganticaerulea*, the resulting seedlings will be a pure member of the particular species. The process of making a cross is quick and easy once a volunteer sees it done, and it can produce large numbers of seeds with a small investment of time. It also is an interesting and educational process, does not involve heavy or messy work, and allows the volunteer to follow the progress of his or her iris seedlings from pollination to mature irises, or even to bloom.

- **Propagation from rhizome cuttings and division.** An iris rhizome blooms only once, and in subsequent generations, the several new plants it produces as “offsets” perpetuate the variety. Some irises produce 2-3 offsets, but others may generate 5-6. “Spent,” or bloomed-out, rhizomes can be used to accelerate this process. A spent rhizome can be cut into 2-3 inch sections and the parts planted in a moist, well-draining medium. In many cases, the pieces will produce offsets, increasing the number of new plants of the variety beyond its natural rate of multiplication. Each new plant produced by this method will be identical to the “mother” plant.

This technique has the advantage of permitting the propagation of especially vigorous or attractive varieties. For example, if one wanted additional plants of the white *giganticaerulea* ‘Her Highness’ or the yellow *fulva* ‘Lottie Butterscotch’, the spent rhizomes of that variety could be targeted for propagation. Or the target might be a variety that is especially vigorous or has other valuable characteristics worthy of transmitting to offspring.

The Species Preservation Project collection in City Park positions GNOIS to develop a diverse array of Louisiana irises unmatched in the country. No other source exists for as many unique forms and colors of Louisiana iris species.

The eventual distribution of excess irises from the collection is part of the vision of the SPP. For more vigorous clones, we are ready to move beyond “saving and maintaining” and to begin using plants for conservation and education activities.

Alternative: Plant Rescues. To date, projects have generally drawn upon irises “rescued” from one location and replanted elsewhere. Such opportunities arise occasionally, and it is entirely appropriate to take irises from a place where they are endangered. While GNOIS should not ignore such opportunities, plant rescues are not proposed as the vehicle for the routine operation of the GNOIS Conservation Program in the future. The advantages of propagation as the core strategy to obtain plants are based on several factors:

<i>Propagation</i>	<i>Rescue</i>
Continuous and predictable after the initial ramp-up	Episodic and unpredictable
Involves light tasks in mostly shady conditions	Often involves hard work in inhospitable terrain in open, sunny, and wet locations
Work scalable to the volunteer capacity of the organization	Volunteer demands are dependent on the size of the iris population in need of rescue and the terrain in which located
Some work (rhizome cuttings) can be incorporated into routine weeding and maintenance	Each rescue project produces added work
Propagated plants easy to handle; can be available in pots or as plugs	Rescue involves handling and planting bare-root rhizomes
Iris in containers better for planting in water and at most times of the year	Bare-root rhizomes often do not transplant well directly into water or in the hot summer months
Can target desirable characteristics of the irises (rhizome cuttings)	Dependent on the source irises growing in a given location
More educational for volunteers as to reproduction processes	More educational for volunteers as to natural growing conditions

The objective of the propagation strategy is to add to the capacity of GNOIS members and volunteers to effectively promote preservation and conservation of our native irises by creating a diverse source of plants through a manageable process. It emphasizes a new, sustainable approach rather than replacing other opportunities, such as rescues, that may arise. Propagation strategies, hopefully, can engage a more substantial proportion of our members in conservation efforts and bring them to the island nursery in regular, comfortable, and supporting roles.

Organization and Activities

To succeed, the Propagation Initiative requires a group to work periodically at our island nursery on the activities described here. A Propagation Manual is being prepared to guide the tasks. However, we may engage in some experimentation involving best practices since Louisiana iris enthusiasts over the years have developed and successfully employed a variety of propagation procedures. We have set up the site for propagation work on the island, and supplies are on hand.

Propagation work will be a chance to learn about a side of Louisiana iris culture that most do not see. Propagation activities will not include the selection of planting projects, actual planting, or publicity surrounding those projects. Propagation volunteers may choose to be involved in plantings or publicity, of course, but these will not be their responsibility. Their efforts will lay the foundation, however, for important conservation work.

Volunteer Day Schedule

We are proposing two regular mornings a month -- the **4th Tuesday** and the **2nd Saturday** -- as “volunteer days” for the Propagation Initiative and other tasks at the Island Iris Nursery. Each will involve 2-3 hours. We are scheduling the first two days and will consult with those interested about a schedule going forward.

The two days are suggested because weekdays are better for some and weekends for others. Take your pick. We will see what shakes out. As usual, there will be thank-you irises for all.

The first dates are: **TUESDAY, Jul 28** and **SATURDAY Aug 6**. Start time: 8:30 - 9:00 AM.