2025 Draft Annual Report for Permit Flickinger-20240415a



Submitted 26 November 2025

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Lady Bird Johnson Wildflower Center

Introduction

Travis County Parks and Balcones Canyonlands Preserve issued permit Flickinger-20240415 for conservation collections of *Prunus* and various rare plant species known or likely to occur on Travis County-managed lands. 2024 collections of *Lithospermum* (=*Onosmodium*) *helleri* (Heller's marbleseed), *Amorpha roemeriana* (Texas amorpha), and *Clematis texensis* (scarlet leatherflower) were summarized in a previous report. In 2025, the permit was amended to add additional staff of the Lady Bird Johnson Wildflower Center as subpermittees. Work this year focused on the two plant species of concern in the Preserve, *Croton alabamensis* var. *texensis* (Texabama croton) and *Philadelphus texensis* var. *ernestii* (canyon mock-orange). In addition, we targeted *Prunus serotina* var. *eximia* (escarpment black cherry), which we were unsuccessful in collecting last year, and a disjunct population of *Persea* (=*Tamala*) aff. *borbonia* (red bay) at Hamilton Pool Preserve.

Methods

Permittees visited the Preserve on six dates between April and November 2025. Collections of plant material were made from populations of target species previously identified by TCNR staff. Coordinates were taken with a handheld Garmin eTrex 30x GPS unit with an approximate accuracy of 3–4 m. Notes on the habitat and population were recorded in the field for the completion of field collection data sheets (Appendix 1). Fruits were collected by hand and kept separated by maternal line in paper envelopes or bags. No more than 20% (*Prunus serotina* var. *eximia*, *Persea borbonia*) or 10% (other species) of available fruits were sampled from any individual.

Further processing of seed collections took place in the seed lab of the Lady Bird Johnson Wildflower Center. Seeds were removed from fruits and inspected for signs of insect damage or other defects, with any inviable seeds discarded. Cut tests were performed on small samples of *Prunus serotina* var. *eximia*. Seeds were then counted and repackaged. Seeds for banking at the Wildflower Center were dried over a saturated salt solution to ca. 35% relative humidity before sealing in foil packets and storing at -20°C. Seeds of one collection of *Croton alabamensis* var. *texensis* (CONS25-008) were diverted for germination testing to determine growth requirements as described below, while the seeds of *Persea borbonia*, which are believed to be intolerant of desiccation (i.e., recalcitrant), were stored moist in anticipation of planting.

Germination tests on *Croton alabamensis* var. *texensis* were performed by assigning seeds from each maternal line to one of two treatments, with the remainder held in reserve. Germination tests were started a few weeks after collection on 16 May after seeds were kept at room temperature and ambient humidity. All tested seeds were surface sterilized for 60 seconds in a 5% bleach solution, rinsed, and germinated in in plastic petri dishes on a moist sand substrate. Nine seeds were pre-treated by clipping the seed coat and placed in a germination chamber at 20°C with 8 hours of light and 16 hours of dark each day. Ten seeds were cold-moist stratified for 30 days and placed in a germination chamber at 20°C with 12 hours of light and 12 hours of dark each day. Seeds were then monitored periodically for radicle growth and re-sterilized as necessary.

Results

A synopsis of seed and herbarium voucher collections made in 2025 is presented in Table 1. Coordinates for collections and significant observations made while working on the Preserve are listed in Table 2. Spatial data files are available upon request. Following is a narrative of activities conducted under the permit in 2025.

The focus of work in the spring was *Croton alabamensis* var. *texensis* (Figs. 1,2). Jonathan Flickinger, Paul Fushille, Isaac Rubinstein, Bill Carr, and Terri Siegenthaler visited the Kotrla Unit 9 April to monitor the plant, which was flowering and setting fruit. The group visited a colony of about 60 plants on an upland site in open shin oak-juniper woodland, where a voucher specimen and some seed capsules were collected. Although the seed capsules were brown and hard, all were later found to be immature and discarded. The group also visited a much larger colony in a canyon, where *Prunus serotina* var. *eximia* and *Lithospermum helleri* were also observed. Another colony on the uplands site was visited 30 April by Rubinstein, who made a collection of ripe capsules. These capsules were significantly larger than those previously collected and soon dehisced to release the seeds. Flickinger and Rubinstein revisited the canyon colony on 3 June, but no mature capsules were found despite previously observing reproductive plants in the area.

Two visits to the Preserve were made in September to collect fruits of *Prunus serotina* var. *eximia*. Flickinger joined Fushille, Christina Tello, and Maddie Ebest to collect *P. serotina* var. *eximia* 19 September at Steiner Ranch. A seed collection with vouchers was made along the Woodland Hills Trail area, of which five of five seeds (100%) were filled in a cut test. Later that day, Flickinger and Fushille visited Vireo Ridge on the Jollyville Unit to look for more cherries. Although none were collected there, vouchers for previous collections of *Amorpha roemeriana* and *Lithospermum helleri* were collected. Some persistent pods of *A. roemeriana* were also collected at that time, but all but one were later found to be infested or rotten. Flickinger returned to Steiner Ranch with Clara Landon 24 September to search for cherries along the trail below Collima Drive. While there, they observed a fruiting population of *Nolina lindheimeriana* and a flowering population of *Agalinis edwardsiana* (Fig. 3) in open areas along the trail. They were met there by Rubinstein and a co-worker. Later in the day, Rubinstein made a collection of *P. serotina* var. *eximia* on the Crossings property, of which only one of five seeds (20%) were filled in a cut test, while Flickinger and Landon collected the same species in the right-of-way along FM 620, just outside of the Preserve.

In the fall, permittees visited Hamilton Pool three times to collect seeds of *Philadelphus texensis* var. *ernestii* and *Persea borbonia*. An initial visit by Alex McClellan and TCNR staff took place 16 September, when mature capsules and vouchers of *P. texensis* var. *ernestii* were collected. This species was found growing on boulders with *Argyrochosma dealbata* (Fig. 4) and other ferns. Flickinger and McClellan visited 8 October to monitor *P. borbonia* along the length of the trail between the pool and the river. All fruits were still green. Flickinger and McClellan visited again 25 November to collect fruit and vouchers. Collected fruits were turning dark blue, but many green fruits were still present on the trees (Fig 5).

All collected plant material is currently housed at the Wildflower Center. No seeds of *Croton alabamensis* var. *texensis* have successfully germinated to date. Two seeds from each treatment

imbibed and broke through their seed coats, but radicle growth was not evident. Seeds of *Philadelphus texensis* var. *ernestii* and *Amorpha roemeriana* are being kept frozen in the Wildflower Center's seed bank, while those of *Prunus serotina* var. *eximia* seeds are being refrigerated. Since relatively few (<100) seeds were collected at each site, we plan to grow out plants. Seeds of *Persea borbonia* will also be grown out and distributed for research and conservation. Herbarium specimens are in various stages of processing, which should be finished early next year.

Analysis

No data analysis was performed.

Conclusions

This year, a total of seven seed collections and six voucher number collections representing six different species were made in partnership with TCNR staff. Of the two species of concern for the Preserve, the seed collection of *Philadelphus texensis* var. *ernestii* was a reasonable size for banking given the few plants a that site. Future work should attempt to locate and collect seed from additional individuals. In contrast, only a few mature seeds of *Croton alabamensis* var. *texensis* were successfully collected, and these have not yet germinated. Late April or May appears optimal for seed collection. Capsules were virtually absent by early June, as suggested by Poole et al. in *Rare Plants of Texas*. More frequent monitoring and/or bagging of fruits may be necessary to obtain a quantity of seed useful for long-term preservation of the genetic diversity of the populations on the Preserve. Timing of seed collection may also be critical for *Amorpha roemeriana*, as the September 2025 collection were more heavily infested than the 2024 collections, which were mostly made in August. In the case of *Prunus serotina* var. *eximia*, fruit production seemingly varies from year to year and is limited to relatively few, generally larger individuals. A sustained collecting effort over multiple years is probably needed to obtain sufficient quantities for seed banking; however, enough material was obtained by the Wildflower Center elsewhere, and this species is no longer a high priority for collection. Finally, a limited quantity of *Persea borbonia* was collected for propagation. This species was previously cultivated at the Wildflower Center, and staff made a seed collection at Hamilton Pool November 14, 2014. This year, another seed collection was made at about the same time of year, which appeared to be on the early side for ripe fruit. Taxonomic research would be useful to determine the significance for conservation of this interesting, disjunct population.

A new permit will be sought for continued plant collections in collaboration with TCNR staff. Seed collections from *Croton alabamensis* var. *texensis*, especially for the large colony in the canyon on the Kotrla Unit is a top priority. Other taxa of interest include Texas endemics such as *Agalinis edwardsiana*, *Anemone edwardsiana*, *Castilleja purpurea* var. *lindheimeri*, *Dalea hallii*, *Nolina lindheimeriana*, *Pediomelum cyphocalyx*, and *Seymeria texana*. Field work to locate populations and collect seed from these and other rare species would help inform management of Travis County parks and preserves as well as advance local plant conservation efforts.

Figures



Fig. 1. *Croton alabamensis* var. *texensis* (Texabama croton) on the Kotrla Unit, 9 April 2025. Flowers (L) and an immature capsule (R). Photos by J. Flickinger.



Fig. 2. Habit of *Croton alabamensis* var. *texensis* (Texabama croton) on the Kotrla Unit, 3 June 2025. Photo by J. Flickinger.



Fig. 3. *Agalinis edwardsiana* at Steiner Ranch, 24 September 2025. Photo by J. White.



Fig. 4. *Argyrochosma dealbata* at Hamilton Pool, 8 October 2025. Photo by J. Flickinger.



Fig. 5. Fruiting twig of *Persea* aff. *borbonia* at Hamilton Pool, 25 November 2025.

Tables

Table 1. Summary of plant material (seeds and voucher specimens) collected in 2025 on properties managed by Travis County. ML = maternal line.

Scientific Name	**Log Number**	**Date**	**Unit**	**No. Seeds / No. ML**	**Voucher**	**Voucher Quantity**
Croton alabamensis var. *texensis*	CONS25-001	4/9/2025	Kotrla	89 / 7	*Flickinger 169*	3
Croton alabamensis var. *texensis*	CONS25-008	4/30/2025	Kotrla	27 / 3	Same as above	
Philadelphus texensis var. *ernestii*	CONS25-043	9/16/2025	Hamilton Pool	321 / 5	*McClellan 10*	3
Prunus serotina var. *eximia*	CONS25-045	9/19/2025	Steiner Ranch	60 / 1	*Flickinger 198*	3
Amorpha roemeriana	CONS24-069	9/19/2025	Jollyville	n/a	*Flickinger 199*	3
Amorpha roemeriana	CONS25-046	9/19/2025	Jollyville	60 / 3	Same as above	
Lithospermum helleri	CONS24-038	9/19/2025	Jollyville	n/a	*Flickinger 200*	4
Prunus serotina var. *eximia*	CONS25-054	9/24/2025	Steiner Ranch	51 / 1	n/a	n/a
Persea aff. *borbonia*	CONS25-072	11/25/2025	Hamilton Pool	53 / 9	*Flickinger 223*	4

Table 2. Coordinates for plant collections and observations made on properties managed by Travis County in 2025.

Point No.	Lat.	Long.	Elev. (m)	Time	Unit	Description
319	30.556297	-97.93291	347	4/9/2025 9:06	Kotrla	*Croton alabamensis* var. *texensis* at upland site.
320	30.556279	-97.932646	352	4/9/2025 9:28	Kotrla	*C. alabamensis* var. *texensis* voucher collected.
321	30.558782	-97.924893	306	4/9/2025 10:00	Kotrla	*Prunus serotina* var. *eximia* observed in canyon near large Croton colony.
322	30.561877	-97.933326	325	4/9/2025 12:20	Kotrla	*Lithospermum helleri* observed in canyon.
n/a	30.557375	-97.930650	353	4/30/2025	Kotrla	*C. alabamensis* var. *texensis* capsules collected.
561	30.357986	-97.88413	223	9/19/2025 10:41	Steiner Ranch	*P. serotina* var. *eximia* collected along Woodland Hills Trail.
562	30.442549	-97.857032	287	9/19/2025 11:44	Jollyville	1 ML of *Amorpha roemeriana*, vouchers for *A. roemeriana* & *L. helleri* collected.
563	30.442636	-97.857414	288	9/19/2025 11:54	Jollyville	2 MLs of *A. roemeriana* collected.
n/a	30.4500443	-97.87421	304	9/24/2025	Crossings	*P. serotina* var. *eximia* fruits collected.
570	30.342877	-98.127883	154	10/8/2025 11:00	Hamilton Pool	2 *Persea* observed; 6 fruits collected from 1 ML 11/25/2025.
571	30.343026	-98.128172	159	10/8/2025 11:02	Hamilton Pool	Boulders with *Philadelphus texensis* var. *ernestii* and *Argyrochosma dealbata*.
572	30.343465	-98.12971	176	10/8/2025 11:12	Hamilton Pool	First *Persea* observed on trail to river.
573	30.346973	-98.134773	224	10/8/2025 12:11	Hamilton Pool	Last *Persea* observed on trail to river.
574	30.344855	-98.13066	226	10/8/2025 12:30	Hamilton Pool	*Berberis swaseyi* observed near fork in trail with *Persea*.
645	30.344594	-98.130384	240	11/25/2025 10:20	Hamilton Pool	2 *Persea* fruits + voucher collected.

Point No.	Lat.	Long.	Elev. (m)	Time	Unit	Description
646	30.344618	-98.130414	241	11/25/2025 10:34	Hamilton Pool	*Persea* voucher collected.
647	30.344781	-98.13051	238	11/25/2025 10:42	Hamilton Pool	2 *Persea* fruits collected.
648	30.344855	-98.1307	235	11/25/2025 10:54	Hamilton Pool	28 *Persea* fruits + voucher collected from 3 ML.
649	30.345861	-98.132028	233	11/25/2025 11:40	Hamilton Pool	5 *Persea* fruits + voucher collected.
650	30.34589	-98.132063	233	11/25/2025 11:41	Hamilton Pool	5 *Persea* fruits collected.
651	30.344982	-98.130859	235	11/25/2025 12:07	Hamilton Pool	5 *Persea* fruits collected.

Appendix 1

Field Collection Data Sheet

Plant Information

Genus: Croton Species: * **alabamensis var. texensis**

Collection Serial Log #: CO**NS25-001** Accession Number:

Date of Collection: * **9 April 2025** Quantity Collected: * **89 seeds, 7 ML**

Form:* ☒ Seeds ☐ Plants ☐ Cuttings ☐ Bulbs ☐ Roots ☐ Other

Collector Information

Collected by: * **Jonathan Flickinger, Paul Fushille, Isaac Rubinstein, William Carr, & Terri Siegenthaler**

Email or Phone #

Agency / Affiliation: **JF (LBJWC), PF & IR (Travis Co. Natural Resources)**

Location Information ☐ Check here if precise locality and landowner to be kept confidential.

County **Travis** Township

Address Landowner

Location Description (exact)*

Travis County Balcones Canyonlands Preserve, Kotrla Unit

Lat. **30.55628°** N Long. **97.93265°** W Derived by: **GPS (WGS84)**

Elev. **352** meters Elev. derived by: **GPS (WGS84)**

Habitat Information (Complete if the collection was made off-site or in the Natural Areas)

Light: ☒ Open ☒ 1/4Shade ☐ ½ Shade ☐ 3/4Shade ☐ Shade

Slope: ☒ Flat ☐ Gentle ☐ Steep ☐ Cliff % or Degrees

Aspect: ☐ North ☐ South ☐ East ☐ West

Litter: ☐ 0 ☒ <1cm ☐ 1-3cm ☐ 4-8cm ☐ >8cm

Soil pH Soil Type **rocky, brown clay** Parent Rock **limestone**

Habitat Type **upland** Plant Community **oak-juniper savanna**

Associated Species **Fraxinus albicans, Juniperus ashei, Quercus sinuata var. breviloba, Rhus virens, Rhus aromatica, Rhus lanceolata, Schizachyrium scoparium, Sideroxylon lanuginosum, Toxicodendron sp., Vitis sp.**

Land Use **natural area cleared for black-capped vireo habitat**

Population Information (Complete if the collection was made off-site or in the Natural Areas)

Plants ☐ 1-10 ☐ 11-30 ☒ 31-100 ☐ 101-500 ☐ >500

Area Covered **30** m X **50** m OR m² total area Avg # Plants/m² Max. # Plants/m²

Population %: Flowering. Fruiting Vegetative

Health of Plants: ☐ Excellent ☒ Good ☐ Fair ☐ Poor ☐ Mixed

Notes **59 plants (including seedlings) counted in area south of two-track road. A few old pistillate flowers present. Collected fruits greenish brown but firm, ca. 1 cm diam. Some herbivory noted. Voucher specimen: Flickinger 169.**

Field Collection Data Sheet

Plant Information

Genus: **Croton** Species: * **alabamensis var. texensis**

Collection Serial Log #: CO**NS25**-008 Accession Number:

Date of Collection: * **04/30/2025** Quantity Collected: * **27 seeds, 3 ML**

Form:* ☒ Seeds ☐ Plants ☐ Cuttings ☐ Bulbs ☐ Roots ☐ Other

Collector Information

Collected by: * **Isaac Rubinstein** Email or Phone # **Isaac.Rubinstein@traviscountytx.gov**

Agency / Affiliation: **Travis County Natural Resources**

Location Information ☐ Check here if precise locality and landowner to be kept confidential.

County **Travis** Township **Leander**

Address Landowner **Travis County**

Location Description (exact)*

Kotrla Unit, juniper forest to the NE of the road.

Lat. **30.557461°** N Long. **-97.9304°** W Derived by: **Garmin GPS**

Elev. meters Elev. derived by:

Habitat Information (Complete if the collection was made off-site or in the Natural Areas)

Light: ☐ Open ☐ 1/4Shade ☐ ½ Shade ☒ 3/4Shade ☐ Shade

Slope: ☒ Flat ☐ Gentle ☐ Steep ☐ Cliff % or Degrees

Aspect: ☐ North ☐ South ☐ East ☐ West

Litter: ☐ 0 ☐ <1cm ☒1-3cm ☐4-8cm ☐>8cm

Soil pH Soil Type **Eckrant and Speck soils** Parent Rock **Edwards Limestone**

Habitat Type **Upland** Plant Community **Oak-juniper woodland**

Associated Species **Quercus sinuata, Ptelea trifoliata, Fraxinus, Quercus buckleyi, Juniper ashei, Garrya ovata, Diospyros texana**

Land Use **Preserve**

Population Information (Complete if the collection was made off-site or in the Natural Areas)

Plants ☐1-10 ☐11-30 ☐31-100 ☐101-500 ☒>500

Area Covered m X m OR m^2 total area Avg # Plants/m^2 **1** Max. # Plants/m^2 **4**

Population %: **10** Flowering. **75** Fruiting **15** Vegetative

Health of Plants: ☒Excellent ☐Good ☐Fair ☐Poor ☐Mixed

Notes **Only 5% of the total number of plants had fully developed seeds. This species grows in varying densities in much of the preserve. Therefore, density estimate is given only for the area sampled under juniper canopy in the upland area of the preserve.**

* **Required field**

Field Collection Data Sheet

Plant Information

Genus/species:* **_Philadelphus texensis var. ernestii_____**

Collection Serial Log #: **CONS25-043** Accession Number: _____
Date of Collection:* **9/16/2025** Quantity Collected:* _____ **seeds (6 MLs)**

Form:* __**X**__ Seeds ____ Plants ____ Cuttings ____ Bulbs ____ Roots ____ Other

Collector Information

Collected by:* **McClellan, Alex; Rubinstein, Isaac** Email or Phone # _____
Agency / Affiliation:
LBJWC Staff (McClellan); Travis County Balcones Canyonlands Preserve (Rubinstein)

Location Information

County: **Travis** Township: **Dripping Springs**

Address: **Hamilton Pool Preserve, 24300 Hamilton Pool Road, Dripping Springs, Texas 78620**
Landowner: **Travis County**
Location Description (exact)*

Southwest side of canyon, ca. 150 m downstream of pool, between trail and service road.

Lat. **30.342831** N Long. **98.12847** W Derived by: **WGS84**
Elev **254** meters Elev. derived by: **WGS84**

Habitat Information (Complete if the collection was made off site or in the Natural Areas)

Light: ___Open ___1/4Shade _**X**_1/2Shade _**X**_3/4Shade ___Shade

Slope: ___Flat ___Gentle __**X**_Steep _**X**__ Cliff ___% or ___ Degrees

Aspect: __**X**_North ___South __**X**_East ___West

Litter: ___0 _**X**__<1cm _**X**__1-3cm ___4-8cm ___>8cm

Soil pH _____ Soil Type: **Calcareous silty clay** Parent Rock: **Limestone / sycamore sand**

Habitat Type: **Riparian** Plant Community: **Juniper-oak-cypress bottomland forest**

Associated Species: ***Quercus buckleyi*, *Juniperus ashei*, *Toxicodendron radicans*, *Persea* sp., *Ulmus crassifolia*, *Ilex decidua*, *Diospyros texana*, *Buddleja racemosa*, *Myriopteris alabamensis*; (*Taxodium distichum* dominant in creek).**

Land Use: **Public hiking trail (otherwise natural)**

Population Information (Complete if the collection was made off site or in the Natural Areas)

Plants ___1-10 __**X**_11-30 ___31-100 ___101-500 ___>500

Area Covered __**20**__m. X _**75**___m. Avg # Plants/m^2 ___**0.02**_____ Max. # Plants/m^2 __**2**_____

Population %: __**0**___Flowering __**70**___Fruiting __**30**___Vegetative

Health of Plants: ___Excellent ___Good _**X**__Fair ___Poor ___Mixed

Notes:

Multi-stemmed shrub to ca. 0.5 m tall. Usually observed growing out of limestone outcrops and oyster rock boulders. Approximately 20 plants were observed. Most fruits (~80%) were brown and in various stages of dehiscence; only brown fruits were collected. Plants that were in the less shaded areas appeared to have a greater number of available fruits. Voucher: McClellan 10. * Required field

Log Number: CONS25-043
Scientific Name: Philadelphus texensis var. ernestii
Provenance: Travis County, Hamilton Pool Preserve

Notes: Most seeds are shriveled and were not counted in total. Filled seeds are apparent without cut testing and correspond to those that are ovoid in shape.

TOTALS									
Amount	**No. ML**	**No. Seeds**	**Cut Test**	**Other**	**Banking**	**1° Storage**	**2° Storage**	**1° Curation**	**2° Curation**
Target	n/a	n/a	0		321	129	128	32	32
Calculated	5	321	0	0	315	259	0	56	0

BULKED SEEDS							
Seed Count	**Cut Test**	**Other**	**1° Storage**	**2° Storage**	**1° Curation**	**2° Curation**	**Remaining**
6							6

SEEDS BY MATERNAL LINE									
Packet	**ML**	**Seed Count**	**Cut Test**	**Other**	**1° Storage**	**2° Storage**	**1° Curation**	**2° Curation**	**Remaining**
ML TOTALS	5	315	0	0	259	0	56	0	0
1 Seed Per Plant									0
	1	3			3				0
	2	49			49				0
	3	23			23				0
	4	175			150		25		0
	5	65			34		31		0

Field Collection Data Sheet

Plant Information

Genus: **Prunus** Species: * **serotina**

Collection Serial Log #: CO**NS25-045** Accession Number:

Date of Collection: * **19 September 2025** Quantity Collected: * **60 pits, 1 ML**

Form:* ☒ Seeds ☐ Plants ☐ Cuttings ☐ Bulbs ☐ Roots ☐ Other

Collector Information

Collected by: * **Jonathan Flickinger, Paul Fushille, C. Tello, & M. Ebest** Email or Phone #

Agency / Affiliation: **JF (LBJWC); PF, CT, ME (Travis County Natural Resources)**

Location Information ☐ Check here if precise locality and landowner to be kept confidential.

County **Travis** Township

Address Landowner **Travis County (land manager)**

Location Description (exact)*

Travis County Balcones Canyonlands Preserve, Steiner Ranch, Woodland Hills Trail

Lat. **30.357986°** N Long. **-97.88413°** W Derived by: **GPS (WGS84)**

Elev. **223** meters Elev. derived by: **GPS**

Habitat Information (Complete if the collection was made off-site or in the Natural Areas)

Light: ☐ Open ☐ 1/4Shade ☒ ½ Shade ☐ 3/4Shade ☐ Shade

Slope: ☐ Flat ☒ Gentle ☐ Steep ☐ Cliff % or Degrees

Aspect: ☐ North ☐ South ☒ East ☐ West

Litter: ☐ 0 ☐ <1cm ☒ 1-3cm ☐ 4-8cm ☐ >8cm

Soil pH Soil Type **Rocky clay** Parent Rock **Upper Glen Rose limestone**

Habitat Type **Upland** Plant Community **Oak-juniper woodland**

Associated Species **Ilex vomitoria, Juniperus ashei, Quercus fusiformis**

Land Use **Understory hand-cleared for fire and habitat management**

Population Information (Complete if the collection was made off-site or in the Natural Areas)

Plants ☐ 1-10 ☐ 11-30 ☐ 31-100 ☐ 101-500 ☐ >500

Area Covered m X m OR m² total area Avg # Plants/m² Max. # Plants/m²

Population %: Flowering. Fruiting Vegetative

Health of Plants: ☐ Excellent ☒ Good ☐ Fair ☐ Poor ☐ Mixed

Notes **Population not surveyed, but species common in area. Most trees either without or with sparse, ripe fruits. Tree semi-exposed to east. Voucher Flickinger 198.**

* **Required field**

Field Collection Data Sheet

Plant Information

Genus: **Amorpha** Species: * **roemeriana**

Collection Serial Log #: **CONS25-046** Accession Number:

Date of Collection: * **19 September 2025** Quantity Collected: * **3 ML**

Form:* ☒ Seeds ☐ Plants ☐ Cuttings ☐ Bulbs ☐ Roots ☐ Other

Collector Information

Collected by: * **Jonathan Flickinger & Paul Fushille** Email or Phone #

Agency / Affiliation: **JF (LBJWC), PF (Travis County Natural Resources)**

Location Information ☐ Check here if precise locality and landowner to be kept confidential.

County **Travis** Township

Address Landowner **Travis County**

Location Description (exact)*

Travis County Balcones Canyonlands Preserve, Jollyville Unit, Vireo Ridge

Lat. **30.442549°** N Long. **97.857032°** W Derived by: **GPS (WGS84)**

Elev. **287** meters Elev. derived by: **GPS**

Habitat Information (Complete if the collection was made off-site or in the Natural Areas)

Light: ☒ Open ☒ 1/4Shade ☐ ½ Shade ☐ 3/4Shade ☐ Shade

Slope: ☒ Flat ☐ Gentle ☐ Steep ☐ Cliff % or Degrees

Aspect: ☐ North ☐ South ☐ East ☐ West

Litter: ☐ 0 ☐ <1cm ☐ 1-3cm ☐ 4-8cm ☐ >8cm

Soil pH Soil Type **Clay** Parent Rock **Edwards limestone**

Habitat Type **Upland** Plant Community **Diverse, oak-juniper woodland**

Associated Species **Brickellia cylindracea, Juniperus ashei, Lithospermum helleri, Quercus buckleyi, Quercus fusiformis, Quercus sinuata var. breviloba, Rhus lanceolata**

Land Use **Natural area managed for golden-cheeked warbler and black-capped vireo**

Population Information (Complete if the collection was made off-site or in the Natural Areas)

Plants ☐ 1-10 ☒ 11-30 ☐ 31-100 ☐ 101-500 ☐ >500

Area Covered m X m OR m^2 total area Avg # Plants/m^2 Max. # Plants/m^2

Population %: **0** Flowering. **~25** Fruiting **~75** Vegetative

Health of Plants: ☐ Excellent ☐ Good ☒ Fair ☐ Poor ☐ Mixed

Notes **Collected from two clusters of individuals on either side of road: one at coordinates and one ca. 40 m away at 30.442636°N, 97.857414°W. Seedlings present. Plants with necrotic spots and old, brown fruits, mostly with exit holes from seed predators. Soil covered by thick layer of mulched cedar. Voucher specimen: Flickinger 199.**

* **Required field**

Lady Bird Johnson Wildflower Center

Field Collection Data Sheet

Plant Information

Genus: **Tamala** Species: * **aff. borbonia**

Collection Serial Log #: **CONS25-072** Accession Number:

Date of Collection: * **25 November 2025** Quantity Collected: * **53 seeds (9 ML)**

Form:* ☒ Seeds ☐ Plants ☐ Cuttings ☐ Bulbs ☐ Roots ☐ Other

Collector Information

Collected by: * **Jonathan Flickinger & Alex McClellan** Email or Phone #

Agency / Affiliation: **LBJWC**

Location Information ☐ Check here if precise locality and landowner to be kept confidential.

County **Travis** Township

Address Landowner **Travis County**

Location Description (exact)*

Hamilton Pool Preserve, trail along Hamilton Creek.

Lat. **30.344855°** N Long. **-98.1307°** W Derived by: **GPS (WGS84)**

Elev. **235** meters Elev. derived by: **GPS**

Habitat Information (Complete if the collection was made off-site or in the Natural Areas)

Light: ☐ Open ☒ 1/4Shade ☒ ½ Shade ☐ 3/4Shade ☐ Shade

Slope: ☐ Flat ☒ Gentle ☒ Steep ☐ Cliff % or Degrees

Aspect: ☒ North ☐ South ☐ East ☐ West

Litter: ☐ 0 ☐ <1cm ☐ 1-3cm ☒ 4-8cm ☐ >8cm

Soil pH Soil Type **Sandy loam** Parent Rock **Sycamore Sand**

Habitat Type **Stream valley** Plant Community **Oak-juniper woodland**

Associated Species **Berberis swaseyi, Berberis trifoliolata, Callicarpa americana, Carya illinoinensis, Diospyros texana, Frangula caroliniana, Fraxinus albicans, Garrya ovata subsp. lindheimeri, Ilex decidua, Juniperus ashei, Lindera benzoin, Myriopteris alabamensis, Quercus buckleyi, Ruellia sp., Smilax bona-nox, Smilax tamnoides, Toxicodendron sp., Ulmus crassifolia**

Land Use **Natural area**

Population Information (Complete if the collection was made off-site or in the Natural Areas)

Plants ☐ 1-10 ☐ 11-30 ☐ 31-100 ☒ 101-500 ☐ >500

Area Covered **800** m X **50** m OR m² total area Avg # Plants/m² Max. # Plants/m²

Population %: Flowering. **33** Fruiting **67** Vegetative

Health of Plants: ☐ Excellent ☐ Good ☐ Fair ☐ Poor ☒ Mixed

Notes **Coordinates location near the center of the population observed along the length of the trail and where majority of fruits collected. Fruits sparse on most individuals, green turning dark blue (early). Some trees with signficant dieback. Voucher Flickinger 223.**

Log Number: CONS25-072
Scientific Name: Tamala aff. borbonia
Provenance: Travis County, Hamilton Pool Preserve

Notes: All seeds to be kept moist and cool until propagated.
No cut testing.

TOTALS									
Amount	**No. ML**	**No. Seeds**	**Cut Test**	**Other**	**Banking**	**1° Storage**	**2° Storage**	**1° Curation**	**2° Curation**
Target	n/a	n/a	5		48	19	19	5	5
Calculated	9	53	0	0	0	0	0	0	0

BULKED SEEDS							
Seed Count	**Cut Test**	**Other**	**1° Storage**	**2° Storage**	**1° Curation**	**2° Curation**	**Remaining**
							0

SEEDS BY MATERNAL LINE									
Packet	**ML**	**Seed Count**	**Cut Test**	**Other**	**1° Storage**	**2° Storage**	**1° Curation**	**2° Curation**	**Remaining**
ML TOTALS	9	53	0	0	0	0	0	0	53
1 Seed Per Plant									0
645		2							2
647		2							2
648 - Uphill		5							5
648 - Junction		8							8
648 - Leaner		15							15
649		5							5
650		5							5
651		5							5
570		6							6