

Managing Disturbance

By Rob Denkhaus, Nature Center Manager

Natural habitats rely on natural disturbances to maintain their health and vitality. Without occasional windstorms to topple mature trees, forests will lose diversity and fail to regenerate because life-giving sunshine cannot reach the forest floor. Without occasional lightning strike fires, prairies become overrun by invasive woody brush or smothered by a thick, organic duff layer that covers the soil.

The Fort Worth Nature Center & Refuge's natural habitats require the same kinds of restorative disturbances and have benefited from recent windstorms, heavy rains, and freezing temperatures. Without these disturbances, the Refuge's habitats could easily fall into an "ecological rut" where things never change.

The fact is that nature is dynamic and ever-changing. Change is required for ecological health. Refuge land management practices often are used to initiate these changes. Prescribed fires reduce woody brush encroachment on our prairies and reduce thick duff layers to useful organic carbon that improves the soil. We use bison to disturb sites with their grazing, rubbing, wallowing, and even fertilizing behaviors. Herbicides and mechanical brush clearing alter ecological succession and allow diverse native species to regain their place in habitats besieged by invasive privet.

The Fort Worth Nature Center & Refuge, just like every other organization and individual, suffered from a number of different disturbances over the past year, and I can't help but contemplate whether, over time, the impact will turn out to be positive or negative.

Like a natural habitat, the Fort Worth Nature Center & Refuge is dynamic, and change can be key in maintaining vitality. The response to COVID-19 disturbed many facets of Refuge operations that can now be seen as positive. Last spring's closure allowed the Friends to complete the Greer Island Parking project with minimal inconvenience for visitors. At the same time, resource management staff completed a large brush-clearing project along Shoreline Road leading to Greer Island, which improves not only the ecology of the area but esthetics and road safety as well. These projects and others, helped along by the COVID disturbance, will provide benefits to the Refuge and visitors for years to come.

COVID-19 precautions also disturbed Refuge programming. In response to the disturbance, education staff adapted existing programs and created entirely new ones, mostly virtual, to accommodate the needs of nature lovers. The results have shown that the modified versions of long-successful programs are still successful and that the new programs have served to introduce the Refuge to a much-larger and more-diverse audience than ever before. For example, a quick analysis of our Facebook followers shows that we have people representing 45 countries from around the world who follow and learn from our virtual natural history programs! The programs, their development spurred by



A colorful redbud is a sign that spring is emerging at the Nature Center, evidence of the cycle of change and rebirth necessary to help maintain the health and vitality of an ecosystem. FONC Photo.

the COVID disturbance, will continue to be part of the Refuge's future educational repertoire, and our experience in response to the disturbance will facilitate more changes and growth in our programs in the future.

Even Refuge staff has been "disturbed" by multiple events over the past year, with Natural Resource Technician Garrett Fannin moving on in his career and longtime Office Manager Anne Hamman retiring after 25 years of service to the Refuge and its visitors. While we lament those losses, we also look forward to the possibilities as two new staff members are brought on board, much as we lament the fallen tree but are excited by the new growth that springs up to take its place.

Managing the Refuge over the past year has been a challenge in managing the safety of our visitors, staff, and volunteers, while striving to ensure that when COVID-19 relaxes its grip on our lives, the Fort Worth Nature Center & Refuge will emerge even better than it was before: ecologically healthier, educationally more productive and diverse, and, as always, a safer and healthier place to explore the wonders of nature.

Please remember that the Fort Worth Nature Center & Refuge is a City of Fort Worth facility and that, like all City facilities, masks and social distancing continue to be required as we continue along the path toward full reopening.