

## **FPDDC Mission**

The Forest Preserve District of DuPage County's mission is "to acquire and hold lands containing forests, prairies, wetlands and associated plant communities or lands capable of being restored to such natural conditions for the purpose of protecting and preserving the flora, fauna and scenic beauty for the education, pleasure and recreation of its citizens."

## **FPDDC Vision**

The Forest Preserve District of DuPage County is a nationally recognized conservation agency that envisions a community in which all citizens share a connection with nature and an appreciation for cultural history.

## **Willowbrook Core Values**

Respect

Empathy

Stewardship

Knowledge

Innovation

Outreach

## Respect

Willowbrook believes in promoting an inclusive environment where mutual respect for our environment, the wildlife that resides in it, and each other is held to a high standard.

## Empathy

While our feelings and experiences will never be comparable to the non-human living beings within our shared environment, we can and should anticipate the needs and challenges of the native wildlife in our care.

## Stewardship

Willowbrook's role in wildlife rehabilitation is a critical part of managing DuPage County natural areas. This is what makes environmental stewardship, or the responsible use and protection of the natural environment through conservation and sustainable practices, so important.

## Knowledge

Willowbrook staff members are constantly striving to gain knowledge to better support the animals we rehabilitate and the environment they are returned back into. It is critical that we not only learn from leaders in the veterinary, rehabilitation, and environmental science fields but that we also share our knowledge with others.

## Innovation

Willowbrook is dedicated to becoming a leader in wildlife medicine and rehabilitation. This transformation will be driven through innovation idea generation and agility in our approach to all areas of medical care, rehabilitation practices, environmental-friendly policies, and community involvement.

## Outreach

Willowbrook aims to be inclusive in our outreach to audiences of different ages, experiences, and socioeconomic backgrounds and provide a shared experience where all members of the community can feel closer to their environment and native wildlife.

### **Willowbrook Mission** (Willowbrook's organizational purpose)

Willowbrook Wildlife Center at Willowbrook Forest Preserve in Glen Ellyn is a native wildlife rehabilitation facility that provides care and medical treatment to injured, sick and orphaned wild animals. It also serves as a resource to teach DuPage residents about living in harmony with local wildlife.

### **Willowbrook Vision** (How Willowbrook will look when it is working extremely well – emphasize purposes, behavior, performance criteria, standards that serve the public and create public value)

Willowbrook Wildlife Center is state of the art wildlife rehabilitation facility that is a national leader in engaging visitors in veterinary science, medical care and wildlife rehabilitation in action while championing healthy interconnected ecosystems to foster and promote safe, healthy, and sustainable communities for all living things in DuPage County and beyond.

### **Goals:** (Critical success factors / key performance indicators, mandates)

1. Over the next 10 years, Willowbrook will transition away from having a collection of 54 non-releasable animals to focusing on 100% rehabilitation and reintroduction into the wild by 2031.
2. To improve the safety and conditions of the facilities for the rehabilitation and restoration of animals and animal species.
3. To improve safety and efficiency of facilities and work environment for Willowbrook staff and volunteers

4. To improve the ability of the facilities to engage and immerse the public in the wildlife rehabilitation processes and ecosystem environments that make up of 26,000 acres of DuPage County open space consisting of restored savannahs, woodlands, wetlands, and prairie environments to foster a greater appreciation for the native species, animal habitats, ecosystem functions and the interconnectivity of natural systems
5. To make the facility more sustainable utilizing the latest in energy efficient, LEED, and green infrastructure design principles.
6. To support the captive propagation of at-risk species and research projects that will advance wildlife medicine and wildlife rehabilitation.

**OBJECTIVES and STRATEGIES** (Specific milestones or targets to be reached)

- 1.1) Create a transition plan to phase out live animal displays and repurpose or remove animal enclosures as animals are removed or are rehomed to other wildlife care facilities by 2031.
  - a. Provide dual-purpose enclosures that can serve as rehabilitation areas with natural habitats.
- 2.1) Create an efficient and sanitary animal rehabilitation operation within sufficient space.
  - a. Organized by species type. (Birds, raptors, carnivores, small mammals herps (amphibians, reptiles), waterfowl, aquatic mammals ,etc...)
  - b. Provide more naturalistic animal habitats (appropriate for each species based upon needs and natural home ranges) for permanent outdoor rehabilitation patient exhibits as they transition from recovery to reintroduction/release.
  - c. Comply with current NWRA and IWRC guidelines for Minimum standards for Wildlife Rehabilitation 4th Edition.

- d. All ponds, cages, etc., having to tie into the sanitary. Will have to ensure the sewer infrastructure is designed to handle the capacity and has sufficient gravity pitch. Effective sediment catch, screening, cleaning and monitoring.
- e. All areas all outlying cages and structures have more than sufficient utilities to accommodate full operational extent and need for most extreme climate conditions (heated water bowls, heat lamps, fans, heating pads, general outlets, lighting).
- f. Ensure that enough space and access is provided around all of the structures, for adequate access with equipment, tools, ladders, lifts, material staging, etc. Mindful of developing landscaping, courtyards, etc., that would not be impacted by maintenance and repair efforts (gutter cleaning, repairs, aerial lifts, etc. Facility and Grounds maintenance vehicles have clearances along trails and around buildings. Emergency access around the site also a consideration.
- g. Sufficient water distribution throughout the site to meet the operational needs (auto fill waterers, yard hydrants, etc.).
- h. Likely to increase waste stream and may look to relocate current dumpsters, etc. Should be further from the buildings/operations and the public. Just a consideration for re-evaluation.
- i. Provide contiguous area to move animals quickly and safely between holding, isolation, recovery, and rehabilitation, areas with limited noise and disturbance.
- j. Provide adequate storage needed for tools, materials, equipment, and other protective gear.
- k. Provide adequate storage needed for food, formula, and other items for care of animals (must be rodent proof).
- l. Provide secure and adequately sized lockers for staff and volunteers.
- m. Create a space for a native vegetable garden to provide animal food (Willowbrook staff to maintain)
- n. Current outdoor housing:

1. Loop (100 ft circular flight barn)
2. RFF1+3 (20 ft raptor enclosure)
3. RFF2 (40 ft raptor enclosure)
4. AFC (large waterfowl enclosure)
5. RFC (large raccoon enclosure)
6. Day Duck Cage (small waterfowl enclosure)
7. Songbird housing x5+hallway
8. FSFC x2 (songbird housing)
9. M cages x 10 (chain link mammal cages)
10. B cages x 6+ 2 hallways (chain link bird cages)

o. Additional outdoor housing needs:

1. Add at least one 100 ft straight flight barn
2. Add at least one more 40-50 ft flight enclosure (RFF2)
3. Add at least 2 more 25 ft flight enclosure (RFF1+3), at least one of which is designed for small species
4. Add another large waterfowl enclosure (AFC) with better functioning deep, year-round pond capable of housing diving ducks
5. Add another large raccoon enclosure (Balance for mission and story)
6. Add a separate large carnivore enclosure (not for raccoons)
7. Outdoor turtle enclosure to house multiple animals at one time, potentially with designated space for E+T species?
8. At least double (if not triple) M+B cage space (different materials, not chain link for birds)
9. Outdoor enclosures for smaller species of mammals?

- 2.2) Provide the tools for safety and maintenance of animal habitats, enclosures, food production and nature trails.
  - a. Controlled access to rehabilitation and staff work areas.
  - b. Workshop and storage space for tools necessary for work above.
  - c. Double gated entrance access for animal enclosures.
  - d. Isolation gates/areas where appropriate for cleaning and feeding.
  - e. Create program opportunities for Visitors to interact with staff in action.
- 3.1) Create an efficient and sanitary clinic and indoor rehab area within one building suite
  - a. House all functions within one contiguous facility.
  - b. Recommend a full time general maintenance position for the site to handle day to day needs related to operations and light building maintenance (cage repairs, HVAC filter changes, exhibit repairs/construction, light plumbing/electrical/lighting repairs, appliance repair, monitoring HVAC, refrigeration systems, minor carpentry, monitor life safety systems, security, filter screens for ponds, ejector pumps, etc.). Lesson the demand for “small” requests that Facilities Management at the site for small reactive repairs/maintenance and operational support.
  - c. Full separation of mechanical equipment (HVAC, Water heaters, electrical panels, fire suppression/alarm, solar inverters, etc.) from operations and storage. Refrain from obstructing access to these systems.
  - d. Recommend a Building Automated system for the Clinic/VC, to remotely monitor, troubleshoot and control systems and receive alerts for issues.
  - e. Service door areas are a big issue. High frequency of entering and exiting the building have a major impact on the balance of controlling heating and cooling balances. Sufficiently provide air curtains or other supplemental make up systems in these areas.

- f. Doorways, walkway, laundry rooms, all have sufficient clearances/widths for push carts, laundry bins and other operation equipment. Egress and hallways often obstructed with staging these items.
- g. Understood will be part of new design, but ensure that the HVAC system is sufficient for make-up air and exhaust to meet animal clinic capacities for healthy environment for the visitors, staff and wildlife.
- h. Increase custodial support or modify operational responsibility by defining and separating true “custodial” and “operational” clean up.
- i. Understanding of site/building signage (general and interpretive) for the site. Anticipation of volume, frequency of changes, what can be done by District sign shop and what would have to be outsourced.
- j. Offices – similar to existing open plan vs cubicle spaces. Need workspaces for new staff members, volunteers and seasonal staff.
- k. Call room (separate from intake and visitor services)
- l. Library/conference – Capacity for 25 in boardroom setting. TV with web camera and smart screen, conference phone, network access, and bookshelves. (Place on second floor).
- m. Kitchen/break room - Desire upstairs in a 2-story building. Space for 2 tables to seat 12-16 people, sink, refrigerator, microwave, dishwasher, stove, and bulletin board.
- n. Staff bathroom separate from public restrooms.
- o. Separate public drop off/intake and triage area.
  - 1. Larger animal drop-off area with room for more than one rescuer indoors at a time, plus seating area? Maybe two work stations for busy admissions days?
- p. Separate private room from front desk and intake area to allow staff to take inquiry, assistance, or wildlife emergency phone calls uninterrupted.
- q. Intake Room - Need larger than existing. Different intake process?
- r. Triage Room - Need at least 2x the existing size with larger incubators, and ICU unit.



- s. Observation Room - (new) Mostly empty so we can do flight testing/observations
- t. Exam room/clinic - (tiny, crowded w/ just 2 people) need 2-3 exam tables, 1 table=wet table, 3-4 computer stations
- u. Lab - (new) Sink, table, 2 microscopes, 1 w/ camera, bloodwork machines.
- v. Imaging Room (radiology, ultrasound, and endoscopy) ideally, rad table and table for scoping and at least 2x the size we have now.
- w. Surgery - Prep room – either part of surgery or part of imaging room, 1-2 surgical tables, pass through window between prep and surgery and equal size to imaging room.
- x. ICU– Need 3x current space, ICU unit, space for a table in center, separated by species? Need run space for larger animals (3)
- y. Isolation Room - Exit to outside and to prep/laundry room!, separate sink, 1-2 runs, 4 cages
- z. Indoor rehab space:
  1. Baby Nursery - (MN) Need at least 2x of existing space, separate room/space for cottontails, separate room/space for raccoons with its own sink, supplies, etc... for sanitation purposes
  2. Juvenile Nursery - (combo BN and EN) Need at least 2-3x existing space with separate areas for birds vs mammals
  3. Bird Holding Room (Is this like the current BN? If so – 2-3x current space with room for indoor flight areas, quiet area for sensitive species, - Will need to ask AC – probably at least 2-3x current space.
  4. Reptile Holding Room – Will need 2x the current space including aquatic facilities for variety of sizes of turtles
  5. Swim Room/Waterfowl - At least 2 full-sized tubs, potentially more, easy way to drain tubs (built in drains), built in swimming pool for diving species with built-in drain

- aa. Research/captive propagation space?? Yes! Large, flexible space w/ separate utilities + work space (sink, etc.)
  - bb. Clean-up room – needs to be 3x current size, at least 2 sinks/sanitizers, 2 washer/dryer sets
  - cc. Indoor supply storage area for AC supplies (towels, etc.)
  - dd. Staging area with seating for staff/volunteers to put on boots, coats, etc
- 3.2) Provide the space for a less disruptive workspace for employees while maintaining staff's interaction with visitors.
- a. Clearly separate intake and reception.
  - b. Create non-public work space for staff to address prolonged phone calls regarding animal care questions or concerns. (This is private room discussed previously above).
- 3.3) Create a more efficient and welcoming visitor center
- a. Building should create sense of embracing visitors and wildlife (pull in to site)
  - b. Open socially distanced gathering space in lobby or outdoor plaza.
  - c. Building and plaza should reflect what goes on at the facility (wildlife rehabilitation / human interaction sculpture (possibly Mike Capser of Billings Montana, quote from wildlife rehabilitator's code of ethics
  - d. Provide sufficient restrooms on the site, including separate staff, public, restrooms and a mother's room
  - e. Provide bottle water filling stations w/ drinking fountains
  - f. Provide adequate benches and seating.
  - g. Provide appropriate accessible access routes and amenities.
  - h. Provide interpretive exhibits that are accessible for all.

- 3.4) Allow visitors glimpses of behind-the-scenes operations (“Transparent” rehab experience that tell stories)
  - a. Live-feed cameras in numerous cages/exhibits YES!! With capabilities to record + view online through mobile platforms and desktop devices.
  - b. Windows into exam room, radiology, surgery, baby nurseries, food prep area?
    - 1. One-way glass for windows into nurseries
  - c. Guided tours? Self-guided if separate staff/public access areas (different hallways)?
  - d. Small classroom/auditorium capacity (25 min/50 max) with live video streams of exams, procedures, or rehabilitation in progress. (as appropriate)
- 4.1) Implement educational interpretive signage and themes throughout site (indoor and outdoor)
  - a. Outdoor - Interpret Importance of food, shelter, habitat, and water to support wildlife, functions of ecosystems to maintaining a healthy planet, Impacts that pollution, climate change, development, and habitat destruction have on these and challenges to wildlife. How to live in harmony with wildlife locally, common and uncommon DuPage County wildlife identification, migration patterns, habitat ranges, nodes, patches, corridors, and buffers, Web of Life and Food Chain system concepts and role of wildlife.
  - b. Indoor – Wildlife Rehabilitators Code of Ethics, Willowbrook mission, medicine and science of wildlife rehabilitation, stages of rehabilitation, equipment used in wildlife rehabilitation and purpose, common findings and statistics, how to care for injured wildlife and how to respond when encountering injured wildlife – Who are you going to call?.
- 4.2) Plan for educational spaces throughout with educational opportunities (space for up to 50 not 100).
  - a. Find a balance between the natural and interpretive/educational experience

- b. Indoor displays to focus on research projects, science and medicine behind wildlife rehabilitation, patient of the day display, statistics display, radiographs displays, and “unnatural items” removed from animals (fishing line, hooks, gunshots, etc...) with animal displays limited to Herps (Amphibians and reptiles).
- c. Outdoor Interactive demonstration gardens of uniquely themed vignettes (Planting for and living with wildlife – How to provide food, shelter, habitat, and water along with what not to do) outdoor spaces and features linking the main loop interpretive trail, rehabilitation area and visitor center. Gardens to feature examples at residential scale for attracting butterflies, hummingbirds and pollinators, attracting birds, attracting mammals, and attracting Herps (Amphibians and reptiles)
- d. Small outdoor demonstration/classroom/amphitheater space (Less than 50 persons)
- e. Rain garden with cleansing and recycling storm water runoff to water demonstration and native food garden plants.
- f. Strike balance with development of site, protecting resources and telling the story.

#### 4.3) Improve site accessibility

- a. Provide a tiered system of trails of different lengths and widths throughout the site to accommodate wheelchairs, visitors of all abilities and maintenance vehicle access. (Minimize redundancy though)
- b. Separate visitor, staff, and maintenance circulation and access..
- c. Accommodate alternative transportation and pedestrian entrance to the site
- d. Clearly mark and separate the main entrance area from the clinic admittance
- e. Provide vehicle access to the ‘back forty’ for maintenance and snow plowing in winter
- f. Provide clear paths of travel and wayfinding around the site to accommodate visitors, maintenance, and staff.

- 4.4) Main outdoor loop interpretive trail - Themed as a journey through local habitats, migration, road to recovery for a particular species from the endangered & threatened list or an adventure from a specific wildlife species perspective.
  - a. Provide different immersive nature experiences (from treetops to exploring a mosaic of wetland/prairie forbs and grasses to the peaceful still waters of a marshes edge and silence of underground burrows).
  - b. Starts and ends near parking lot and picnic shelter connecting east and west sides of the preserve.
  - c. Access located outside of secured rehabilitation areas and clinic/visitor center but connected via demonstration gardens and path to Clinic/Visitor center.
  - d. No live animal displays/enclosures with animals on trail. (Opportunities to view animals only in their natural settings or in restored ecosystems at observation nodes)
  - e. Provides unobtrusive themed interpretive observation nodes immersed in various ecosystems with features to assist in quiet observation of wildlife in their natural habitats.
  - f. Highlight on-going restoration work in the preserve – if you build it they will come (wildlife that is).
- 4.5) Create a strong visual or spatial connection between the visitor center and the outdoors
  - a. Use of bird friendly glass to bring outside in.
  - b. Views/vistas to outdoor features.
  - c. Incorporate greenery/imagery inside?
- 4.6) Restore existing ecosystem habitats. Allow for developed interpretive and wildlife viewing nodes along edges and perimeter with existing trail system(Design by FPDDC Staff)
  - a. Woodland Enhancements
  - b. Savannah Enhancements

- c. Prairie Enhancements
- d. Stream Enhancements
- e. Marsh/Wetland Enhancements

- 5.1) Incorporate LEED design principles into the new building and create a “net zero” facility. (Avoid LEED certification cost).
- a. Geothermal energy for heating and cooling (Need a real cost/benefit analysis; ROI calculation If feasible)
  - b. Expanded solar energy systems w/ potential battery backup for animal care building.
  - c. Use of renewable materials / recycling.
  - d. Natural lighting and lighting controls.
  - e. Local material sourcing.
  - f. Minimize urban heat island impacts
  - g. Functional storm water management plan w/ recycling, cleansing and reuse of storm water.(water vegetable and other demonstration gardens)
  - h. Minimize impervious areas with new development and maximize pervious areas wherever possible and practicable to reduce storm water runoff and pollutant loads.
  - i. Use only native plants.
  - j. Follow “Sustainable Sites” principles.
  - k. Large on site composting - need VERY large capacity
  - l. Grey water recycling system and consider constructed wetland treatment system with possible sanitary sewer connection to simplify permitting/monitoring requirements?(Part of stormwater management for site)
  - m. On-site composting (Glen Ellyn may have restrictions)

- 6.1) Provide space in the visitor center to highlight the species recovery projects. (Permanent or movable?)
  - a. Blandings Turtle
  - b. Monarch Butterflies?
  - c. Devils Crayfish?
  - d. Hines Emerald Dragonfly?
  - e. Smooth Green Snake?
  - f. Other Considerations TBD – Rotating Exhibits?
- 6.2) Relate species recovery projects to importance of habitat restoration to minimize development and habitat fragmentation to sustain healthy communities.