

Appendix 9.8:

Exploration: Potential Bergen County Zoological Gardens

The current Bergen County Zoo, located at Van Saun County Park, has been a favorite attraction among many residents. However, the Zoo's aging infrastructure is in need of significant updates in order to retain national accreditation, and public comments indicate parking shortages and heavy traffic congestion on local roads at peak visitation times.

A variety of options have been discussed to address these issues, such as adding a parking deck at Van Saun or expanding the size of the Zoo to meet demand and prevailing zoo standards. These options would have an impact on the overall character of Van Saun and would not address traffic congestion on local roads.

This Appendix presents another option for consideration: a potential Bergen County Zoological Gardens located at Overpeck County Park Area IV following capping of the former landfill. Moving the Zoo's venue could allow for more modern exhibits and accommodate a regional audience without the parking and transportation limitations currently experienced at Van Saun. The petting farm could remain at Van Saun, along with additional family-friendly amenities.

9.8 EXPLORATION: BERGEN COUNTY ZOOLOGICAL GARDENS

A POTENTIAL OPTION FOR THE BERGEN COUNTY ZOO

OPTION TO RELOCATE THE BERGEN COUNTY ZOO TO OVERPECK AREA IV

Why Potentially Relocate the Zoo?

The Bergen County Zoo is one of the most beloved features in the entire Bergen County Parks system and has delighted generations of residents and non-residents alike. In the Parks Master Plan online survey, the zoo and Van Saun County Park ranked as the second most iconic representation of Bergen County specifically mentioned. Many respondents shared fond childhood memories of visits to the zoo, and indicated that they have returned regularly over the years with children and grandchildren, indicating a strong emotional tie.

The amount of land currently allotted to the zoo at Van Saun restricts its size and number of exhibits, however, and the aging infrastructure needs significant updates. The zoo's location within a residential setting along busy local roads complicates matters, as does the limited Van Saun parking, which is already overwhelmed at peak visitation periods. For these reasons, the

County is exploring several options to address the situation, such as adding a parking deck or expanding size of the zoo at its present location; no decision has been reached at this time.

Current conceptual plans by Jones & Jones (see Appendix 9.3) to nearly double the size of the zoo would result in the conversion of approximately 11 acres of park open space, the closure of a main access road and the construction of a large parking deck at Van Saun. The projected number of additional visitors to the expanded zoo raises questions about how to: 1) handle a large increase in visitors to a venue that is already perceived as overcrowded without negatively impacting the overall park aesthetic, and 2) accommodate a substantial increase of vehicles on already congested local roads.

While some public feedback has reflected interest in seeing zoo updates, the majority of comments about Van Saun zoo expansion express apprehension regarding the impact on overall park experience (specifically loss of open space and visual impact of the parking deck), and impacts on traffic and parking.



Figure 1. The current Bergen County Zoo at Van Saun County Park is a beloved icon of the parks system, but given the constraints of its current location, making needed infrastructure upgrades will substantially impact the overall character of the park. Relocating the bulk of the existing zoo to Overpeck Area 4 is one potential option (Courtesy of CUES).

Given Van Saun's physical constraints and the strong emotional ties the public holds to a park that specifically caters to families with young children, it is appropriate to consider other avenues to create a state-of-the-art zoo within the park system. While a small petting zoo of farm animals geared towards small children could remain at Van Saun as part of the colonial farm, augmented by the addition of Field Station Dinosaur and other child-friendly amenities, a truly unique regional attraction could be developed at Overpeck Area IV.

Benefits of Overpeck Area IV Location

Overpeck Area IV has over 70 acres that can be opened to the public for recreational purposes following capping of the former landfill. Figure 17 shows the footprint of the 24-

acre Jones & Jones expanded zoo plans overlaid on Area IV. The planned light rail extension with two stops adjacent to Overpeck (still in conceptual phase--has not been designed or funded), complemented by Routes 80 and 95, makes Area IV a true regional destination, providing access on a scale that the Van Saun context cannot support. With the ability to draw visitors from Hoboken, Jersey City, and NYC in addition to Bergen County residents, the zoo could operate on par with other nationally-recognized zoos. Furthermore, the draw of the zoo would support more ridership on the light rail, particularly during off-peak hours such as on weekends. Adding parking at Area IV, a pedestrian bridge linking Area III to Area IV over the water, and a robust bike/walk path system would help alleviate some of the present parking and local transportation issues.



Figure 2. Footprint of the proposed Bergen County zoo expansion by Jones & Jones overlaid on Area IV of Overpeck County Park to illustrate the amount of land it would utilize (Courtesy of CUES).

Is a Zoo on a Former Landfill Feasible?

Structures have been successfully built on landfills around the globe, from the Meadowlands Environmental Center at DeKorte Park in Lyndhurst, NJ, to the Dubai Zoo/Safari Park in Dubai.¹ An assessment is needed to determine what would be possible at different portions of the Area IV site given load limits, capping infrastructure, soil subsidence, etc.

An Area 4 Bergen County Zoological Gardens

Public comment on the online survey indicated interest in botanical gardens, public art and natural resources stewardship issues. Rather than make the zoo a run-of-the-mill animal attraction with other unrelated activities outside its walls, the new Bergen County Zoo could be a hybrid botanical garden and conservation-oriented zoo/research center in which the relationship between humans, wildlife and their surrounding environment is explored with artistry and sophistication to the delight of all ages. This innovative approach to the Bergen County Zoological Gardens would offer unique experiences not currently available in the region.

Conceptual Plan

The 24-acre zoo footprint and thematic groupings of exhibits as designed by Jones & Jones could be adapted to integrate approximately 26 acres of gardens. Figure 4 illustrates a conceptual plan for how the zoo and gardens could be situated at Area IV.

Taking new transportation options proposed by the Voorhees Transportation Center for an Overpeck loop road system into account, the main zoo/gardens entrance and parking could be sited in the southern portion of Area 4 near the present location of the Palisades Park ShopRite. A proposed road along the railway on the eastern edge linking to Bergen Equestrian Center would provide service access while enhancing vehicular traffic flow.

Outside the zoo/gardens perimeter, the Overpeck Creek shoreline would be restored with a native riparian buffer blending into an open meadow habitat for local and migratory species. A sinuous boardwalk and walk/bike loops through portions of the meadow would offer periodic vistas across the water and support free circulation around Overpeck.

Animal Exhibits

In rich, immersive experiences, visitors could observe animals interacting with the flora they coexist with in the wild. More weather-sensitive species exhibits would be housed in a conservatory



Figure 3. The Meadowlands Environmental Center at DeKorte Park in Lyndhurst, NJ, is built on a former landfill (Courtesy of The Meadowlands Blog).²



Figure 5. Integration of animals with plants from their native habitats. A conservatory could house more climate-sensitive species exhibits, creating a more dynamic and immersive visitor experience while providing year-round revenue (Courtesy of TizzleBDizzle/Pixabay).³

BOTANIC GARDENS ACREAGE COMPARISON:

- Thielke Arboretum (Glen Rock, NJ) = 11 acres⁴
- Grounds for Sculpture (Trenton, NJ) = 42 acres⁵
- Brooklyn Botanic Garden (Brooklyn, NY) = 52 acres⁶
- New York Botanical Garden (Bronx, NY) = 250 acres⁷
- Longwood Gardens (Kennett Square, PA) = 1,077 acres⁸

Figure 6. Acreage at existing botanic gardens in the region for context. (Courtesy of CUES).

that could be rented out as a unique venue for community and private events. Outdoor exhibits would be grouped thematically by geographic region, with the North American plains species on the outer edge so their habitat blends into the meadow habitat

outside the zoo perimeter. Enclosures should provide excellent stimulation and quality of life for the animals, which serve as ambassadors for their species, while facilitating visitors to connect in a personal and compelling way to the animals.



Figure 4. Conceptual Plan of a new Bergen County Zoological Gardens at Area IV in Overpeck County Park (Courtesy of CUES).



Figure 8. A dramatic Dale Chihuly art installations adds life to a water vignette at the Denver Botanic Garden (Courtesy of Nel Lampe).¹⁰



Figure 9. The integration of gardens would serve a wider audience than the zoo alone (Courtesy of S. Bardet).¹¹

Art in the Gardens

A curated collection of evocative environmental art installations would infuse life in gardens without animal exhibits while stimulating thought about conservation/nature themes in new ways. Some excellent case studies of art in public gardens include the Denver Botanic Garden (Denver, CO) and the Grounds for Sculpture (Trenton, NJ), while the Tiff Nature Preserve, a former landfill in Buffalo, NY also has some evocative ecologically-themed art exhibitions in the landscape.

Apart from the North & South American themes of the animals, other garden themes might include native plant gardens, pollinator gardens, a moon garden, espalier or historic kitchen gardens, and water gardens. The addition of an Asian collection could add further interest while reflecting the heritage of a significant population of Bergen County residents. Traditional architecture, garden style, and art could be re-interpreted in the exhibits (where appropriate) to add another layer of appreciation for how flora and fauna have influenced the human experience. Focusing on achieving a high quality, multi-sensory series of experiences is key—visitors should leave inspired and feeling that they have just travelled to new places.



Figure 10. Water gardens woven into the site would support plants that most residents don't usually experience, as well as assist in water treatment (Courtesy of New York Botanical Garden).¹²



Figure 11. A closed-loop wastewater bio-filtration system like this one at Woodland Park Zoo could save resources while providing education and keeping water out of the landfill (Courtesy of D. Dow).¹³

Sustainable Best Practices & Stewardship

The new zoo should be designed from the very start to incorporate numerous best practices for sustainability and promote a culture of responsible resource stewardship. For example, a closed-loop wastewater bio-filtration system could be woven into the animal exhibits and gardens to add aesthetic value, save on operational cost, and offer stewardship education while keeping water from infiltrating the landfill subsurface. The Woodland Park Zoo in Seattle, Washington has an example of such a bio-filtration system.

In addition, solar panel covered surface parking lots could help generate electricity for lighting and zoo operations. Animal waste could be provided to farms that use it as compost (mushroom farms in PA, farms in Bergen County, etc.). All operations from the office to the food concessions should incorporate more sustainable practices where possible from recycling to compostable utensils. Creative ways of communicating to visitors how these sustainability best practices function, save resources and benefit the planet becomes part of the educational dialogue of the site, too.

Concessions & Events

Indoor and outdoor venues need to be included to facilitate regular programming (story hours, summer camps, school groups, etc.) and provide your-round event space for community and private gatherings.

Gardens and water features would provide a beautiful background for events and celebrations, such as weddings and corporate events, making the the zoological gardens a unique venue within the region. The conservatory in particular should be designed to not only support plant and animal exhibits, but also serve as a unique and desirable venue for weddings, galas, corporate dinners and other special events



Figure 12. A combination of indoor and outdoor concessions would facilitate year-round use of the facilities (Courtesy of Aphrodite Photography).¹⁴



Figure 13. Gardens and water features like these at the Grounds for Sculpture provide a beautiful background in which community members can build lasting memories (Courtesy of Michael Dempsey).¹⁵



Figure 14. The Zoological Gardens could serve as a unique venue in Bergen County for community or private events to generate additional revenue. Thus the design of all areas need to consider catering, photography, and other practical elements from the beginning (Courtesy of Jill DeVries).¹⁶

that supplement revenue. Thus catering, photography and other practical elements need to be considered in the design from the very beginning.

The gift shop could supply not only quality souvenirs (educational games, books, stuffed animals, etc.), but also pieces by local & independent artists (photographers, graphic artists, jewelry designers, musicians, etc.) for unique gifts and useful items aimed at all different ages. Companies with eco-friendly packaging, materials, etc. should be encouraged.

Programming

The hybrid zoo and botanical garden model allows the facilities to connect with a wider audience through engaging, interdisciplinary year-round programming. For example, in addition to more family-oriented activities and summer camps, adults could take painting classes or attend a guest lecture on how plants and animals have inspired technological advances. Longwood Gardens in PA provides an excellent case study of a botanic garden that utilizes engaging, child-friendly design without taking on the feel of a “kids only” venue.

Nevertheless, an interactive children’s discovery zone could allow youth of various ages to explore conservation themes and a wide range of STEAM—Science, Technology, Engineering, Arts, Mathematics—concepts in a very hands-on manner, much like at Liberty Science Center or the Fairmount Water Works. Furthermore, developing a robust student internship program would not only help support the zoo operations, but also provide valuable professional skills-building experience



Figure 15. Hands-on discovery at the Fairmount Water Works. Incorporating an interactive children’s discovery zone at the Zoological Gardens would provide an engaging way for youth of many ages to explore a variety of conservation themes and STEAM concepts (Courtesy of Trip Advisor).¹⁷

for emerging professionals, enhancing the value of the zoo to the community. Through rich partnerships with other zoos and disciplines (education, engineering, art, etc.), the zoo could become a tremendous hub of great education, memory making, and changes for a more sustainable planet.

SAMPLE PROGRAMS FOR BERGEN COUNTY ZOO & BOTANIC GARDENS:

- Early Childhood (Meet the animals, storytelling, etc.)
- Childrens Interactive Discovery Zone with rotating exhibits
- High/School & College internships to build marketable professional skills in graphic arts, social media, horticulture, education, etc.
- Classes in art, photography, horticulture, etc. (perhaps in partnership with Bergen Community College, local adult schools or community groups)
- Awareness weeks & live animal presentations
- Seasonal webcam
- Scout badges & community service projects
- Zoo camps & Assist A Zookeeper Days
- Yoga & performing arts at the zoo
- Family movie nights & scavenger hunts

Conservation Focus

One of the most critical roles (and challenges) of the modern zoo is inspiring visitors to take an active role in natural resource stewardship so more species living in the wild do not end up endangered. Setting aside meadow habitat at Area IV and incorporating native plants to support local and migratory wildlife helps send the message that it is not only the rainforest that is endangered, but also our own local habitats.

Within the zoo and gardens, special attention and creativity should be employed to not only delight visitors, but also effectively teach and excite them about plant and wildlife conservation. Engaging with the public (particularly youth) as conservation partners through webcams, robust social media outreach (Fig I6 & I7), personal encounters, etc. is a key element in growing support for particular species and for building an active stewardship culture.



Figure 17. The Cincinnati Zoo's Fiona the Hippo social media campaign provides a superb example of how to engage the public as conservation partners, including the copious use of short video/photo updates, creation of #TeamFiona, and expression of appreciation for the public's letters and support (Courtesy of Cincinnati Zoo).¹⁹



Figure 16. Actively engaging with the public as conservation partners through social media and other mediums is a key element in building an active stewardship culture. Flock, the Houston Zoo's youth professionals and philanthropists donor club, provides an example of how to build a following for the zoo, while incorporating conservation education and socialization opportunities (Courtesy of Flock).¹⁸

Providing a home to animals that cannot function on their own in the wild or that are being rehabilitated before release (e.g. Turtleback Zoo sea turtles rehab/research program) are two ways to acquire new animals responsibly and provide talking points about how human activity can harm as well as heal the planet. The Houston Zoo helps visitors understand the impact of their money by openly sharing that “Over the past year, special events at the Houston Zoo have helped fund care for 14 orphan gorillas, provided medical care for 89 wild sea turtles, and planted 258 corals in the ocean.”²⁰



Figure 18. Many zoos provide homes to animals that cannot survive in the wild, need injury rehabilitation before eventual release, or are part of endangered species breeding programs (Courtesy of ZooBorns).²¹

The Meadow & Shoreline

The grasslands of the Great Plains exhibits could blend out of the zoo/botanic gardens into the meadow habitat to the northwest. In this free access zone, a sinuous boardwalk would weave its way along the Overpeck Creek shoreline, enhancing the feeling of being near the water and away from busy life. Topography should be manipulated to provide engaging grade changes, enhancing the sense of journey, and offering periodic vistas over the water. Appropriate tree species would be strategically deployed on mounds of earth to avoid compromising the integrity of the landfill cap while giving shade and aesthetic value.

Periodic seating should be included and secondary paths in the meadow should be looped to offer variety and accommodate visitors that cannot walk for extended periods of time (e.g. seniors). Some restroom facilities and refreshment venues at the zoo and gardens should be situated to be available to visitors without having to pay an entrance fee. Although the focus of the meadow area is on passive use, occasional temporary art pieces could be incorporated into the landscape to encourage repeat use and serve as landmarks. Even the fencing that separates the for-fee zoo from the free access meadow area could have a more sculptural appeal.

The Overpeck Creek shoreline should be enhanced to protect the water and encourage biodiversity, leaving at least a 50-foot riparian buffer between the water and the meadow area.

Facilities Management

Professional expertise and management are needed to realize the tremendous potential of the zoo and botanic gardens. The Zoological Society of NJ and foundations that manage Grounds for Sculpture and Longwood Gardens could be helpful case studies. A concerted effort should be made to engage local community groups for additional volunteer labor to help keep the attractions looking their best.



Figure 19. A boardwalk with periodic vistas over Overpeck Creek like this one at Mono Lake, CA, would enhance the feeling of being near the water (Courtesy of Maven).²²

WHAT WOULD HAPPEN AT VAN SAUN?

With the departure of the zoo, Van Saun would retain the carousel, pony rides and train, and could focus on other opportunities to make the park a child-friendly destination and draw on pieces of Bergen County history.

Since the zoo at Van Saun has been such a beloved element of the park, a small petting zoo of farm animals should be retained, perhaps as part of a farm-to-table food concession to enhance the old Dutch barn historic feel and re-ground new generations in New Jersey's agricultural history.

In addition, a small children's theater could be installed for special programming, as well as for impromptu performances by young visitors following in the footsteps of Bergen County's many famous performing artists.

An interactive, accessible nature play area (reminiscent of Teardrop Park in NYC) and splash pad could be installed, too, to complement the current playground by encouraging active, imaginative recreation by children of wider ages and those with special needs. Field Station Dinosaurs and an archeological dig area (in reference to the old mastadon

skeleton found in Bergen County) could potentially be annexed to the nature play area with vegetated buffers.

These additions would add many new seasonal programming opportunities to the park's current offering, such as dance, drama, music, natural science exploration, gardening and even cooking. Pertinent examples include Terhune Farms in Princeton, NJ and The Nature Place Day Camp in Chestnut Ridge, NY, which both run fun, hands-on children's programs that incorporate gardening, science and nutritional education. In addition, the Penn Museum offers a variety of archeology-themed camps and Archeology in the Community, a Washington D.C.-based non-profit, partners with communities to help tailor children's archeology programs.



Figure 20. Nature-oriented play at Teardrop Park, NY, that provides alternative stimulation to the more traditional playground at Van Saun (Courtesy of MVV Associates).²³



Figure 21. A splash pad with natural forms like this Little Rock, AK, park could add an accessible water play element at Van Saun (Courtesy of TripSavvy).²⁴



Figure 22. A small petting zoo as part of a farm-to-table concession would give young Van Saun visitors personal encounters with animals (Courtesy of Green Meadows Farm).²⁵

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