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The Owl and the Monitor: Nature Versus Neighborhood in the Development of Southwest Florida

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On the southwestern coast of Florida, pinched between suburban homes and a shrinking tangle of mangrove islands near the mouth of the Caloosahatchee River, two unlikely rivals act out a curious endgame of twentieth-century consumerism. Here, one of Florida's last surviving populations of burrowing owls is threatened by the Nile monitor, a four-foot lizard brought to the Gulf Coast by the exotic pet trade in the 1980s. In the decades since its introduction, the monitor's ability to thrive in this coastal setting with hundreds of manmade canals has enabled it to proliferate and displace native fauna like the owl, drawing concern from ecologists and concerned citizens alike. State agencies and local newspapers have published dozens of short articles and impact studies that call our attention to the problem of exotic pests in Florida's fragile ecosystems, and in Cape Coral itself, the monitor has become something of a supervillain, evading wildlife officers charged with its removal and menacing residents and their pets from the warm concrete of the city's many seawalls. But these two animals' inverse relationship reflects more than the danger of invasive species within the borderlands of the Anthropocene. The story of the owl and the monitor is also a parable for the ways in which certain conceptions of nature and patterns of consumption created by post-WWII housing speculation have continued to define humans' impact on Florida's environment and turned the Sunshine State into a symbol of Americans' most ambitious—and destructive—tendencies. In Cape Coral, what began as a corporation's promise to remake the wild ecology of Southwest Florida into a waterfront paradise subsequently devolved into tract upon tract of vacant homes and overgrown theme-park kitsch, a badly damaged ecosystem, and ultimately, the owl's precipitous decline. Today, the owl and other native species wage an existential struggle on the peninsula, not just against the monitor, but against the human imagination itself.[i]

In Florida, this is nothing new. The impact of human intervention in the natural environment—in terms of both habitat loss and the introduction of invasive plants and animals—has been an important part of the region's history since Europeans arrived in the sixteenth century. Hernan de Soto's decision to bring pigs to the peninsula in 1539, for example, catalyzed a succession of bio-invasions and ecological disruptions that continue to this day.[ii] Ensuing centuries of colonization, settlement, and commercial pursuit further changed the landscape as humans probed for mineral wealth and erected ever-larger communities in service of their extractive goals. Uniting each of these disparate efforts across the span of time was a common determination to improve upon or create material wealth from Florida's natural environment.[iii]

But in the early twentieth century, the state entered a new level of anthropogenic change, as everyone from Northern industrialists to European hat makers turned their gaze on Florida as a source of untapped resources and vitality. Aided by new technology and infrastructure, humans accessed more of the peninsula's treasures than ever before, draining vast stretches of its wetlands, building grand hotels, and hunting birds like the Snowy Egret to near extinction. By the 1950s, the extension of a nationwide interstate system and the invention of conditioned air had opened the last of Florida's subtropical climes to developers and their clientele.[iv]

Most histories of development in the state focus on this era of housing booms and tourist traps, describing the technological feats of characters like Hamilton Disston or Henry Flagler and tracing their influence into the epoch of Disney and beyond. Some works have even focused on specific coastal communities, like Bruce Stephenson's study of St. Petersburg or David Dodrill's *Selling the Dream*, which chronicles the creation and stagnation of Cape Coral itself. Most recently, environmental historians have looked beyond the humans who shaped these communities to ask important questions about the ecological impacts of Florida's transformation, emphasizing development's burden on nature and the role of an environmental ethic in combatting further decline. Scholars like Jack Davis and Cynthia Barnett, for instance, have urged us to re-examine the

legacies and definitions of human "achievement" in Florida, and touted the importance of activism in helping to save habitats like the Everglades and Florida's springs from further destruction.[v]

What merits further discourse, however, are the specific mentalities and attitudes towards nature that not only informed the actions of mid-century real estate developers, but also continue to cripple the efforts of even well-intentioned reformers who lurch to protect endangered resources under the assumption that a "balanced urban landscape" where people live in harmony with nature is still possible. Campaigns to save the owls or to protect Florida's aquifer, for example, have echoed this call for human action towards preserving, citing the need to protect Florida's economic future and continued recreational value however possible.[vi] In responding to our own mistakes by intervening further, however, we fail to identify the real root of such calamities, which is the impulse to "fix" nature without removing ourselves from the equation altogether. By examining the full range of impacts that human "control" and "improvement" have manifested in places like Cape Coral, whether that means dredging canals or trapping monitor lizards, we might better understand the true complexity of ecological decline and, ultimately, make an argument for less human "help," not more.[vii]

About seventy miles downstream from where the Florida Trail crosses Lake Okeechobee at Alvin Ward Park, the Caloosahatchee River discharges its brackish outflow into the Gulf of Mexico. Here, sediment from the Everglades reaches the sea and brings a blush of tannin and nutrients to tidal inlets. One plant—the red mangrove—thrives above all else in this briny convergence zone, creating entire islands of partially submerged root systems that provide cover and forage for hundreds of species of marine animals and birds.[viii] At the shoreline, this bramble gives way to 110 square miles of pine stands and wiregrass prairies that make up the peninsula we now call Cape Coral. Long before it became a grid of canals and asphalt, this landscape was etched by the footpaths of black bears and panthers and the excavations of animals like the gopher tortoise and burrowing owl. Humans, too, were present, and the river's terminus cradled the fishing camps and trading sites of a succession of Native groups from the Calusas to the Seminoles. Each group altered the ecology in its own way, burning underbrush to create grazing zones for game, constructing fishing weirs, or in the case of Glades

Culture groups, building middens of discarded shells upon which to erect ritual and housing complexes. But because of these groups' fluid settlement patterns and subsistence-focused conceptions of land use, much of the peninsula avoided dense habitation prior to the nineteenth century.[ix]

Following the forced removal of much of Florida's Indian population by the Federal Government in the mid-nineteenth century, however, many Euroamericans saw new investment potential in the state's waterways and untapped raw materials. The state's "watery heart," Lake Okeechobee, presented intrepid businessmen with a unique opportunity for shipping and transport between inland centers of production and coastal outlets, as well as thousands of square miles of potential farmland. In 1881, industrialist and real-estate developer Hamilton Disston entered into an agreement with the state "to drain and re-claim by draining all overflowed lands in the State of Florida practicable and lying south of Township 23" (Polk County).[x] His Gulf Coast Canal and Okeechobee Land Company purchased 4,000,000 acres at twenty-five cents apiece, including the swampland between Lake Okeechobee and Lake Hicpochee, about a dozen miles away. Disston's company then dredged what one early twentieth century historian termed "vast areas of waste land" for "the uses of civilization," connecting Okeechobee to the Caloosahatchee and the Gulf Coast for the first time, and setting the precedent of development into the southwestern quadrant of the state.[xi]

By the end of the 1920s, a handful of Anglo homesteaders had followed Disston's canal and a growing network of rail lines downstate, establishing permanent residences near the coast and forming the growing township of Fort Myers. Families like the Molters and Belvins started cattle ranches and truck farms on the peninsula across the river from Ft. Myers, which constituted the first dedicated efforts to transform the landscape of present-day Cape Coral for commercial production. These self-described "pioneers" cleared pasture, planted non-native Bahia grass for their livestock, and grew onions, okra, radishes and potatoes for sale in town. Equipped with the belief that, as historian William Cronon described it, "wilderness should turn a mart," homesteaders altered the ecology around them in new ways, appropriating nutrients via phosphate mining for the production of crops upon the drier, inland portions of the peninsula and displacing wildlife from the pine flatlands that surrounded them.[xii] Even the area's most rugged patch

of scrub affronting the bay to the south, known as Redfish Point, was claimed and marked for transformation as Dr. Franklin Miles of Indiana, the inventor of Alka-Seltzer, purchased legal title to both shores of the river's mouth in 1906. Miles hoped to escape the demands of the business world and ease his tubercular wheezings in the area's balmy climate, but only a handful of scraggly citrus trees would grow in the sandy, salty earth, and the southern end of the peninsula remained untamed into the twentieth century.[xiii]

Since they couldn't convert the whole Cape into a plantation, a growing population of settlers sought another way to reinvent this "ancient" landscape as their own. In a masterful performance of what Jean O'Brien calls "firsting," the homesteaders of the peninsula forgot that indigenous peoples had survived off the coastal environment around them for thousands of years prior and reimagined themselves as its earliest inhabitants. They created new place names and spun "frontier" myths that redefined the region as a proving ground of American ingenuity.[xiv] In 1930, just after the stock market crashed and banks across the country went out of business, a local preacher named "Wild" Bill Belvin tested this mindset by trudging off to live in the woods for an entire year. According to newspaper accounts, Belvin sought to prove that man could in fact tame and survive in this wilderness virtually unaided. Only his eyeglasses and false teeth connected him with the material world as he slipped off naked into the scrub near Burnt Store Marina. And although he relied upon a chickee-style hut perfected by generations of Seminoles before him, he said nothing of their precedent after emerging in a grass skirt twelve months later (and reportedly, ten pounds heavier). By appropriating the supposedly primitive aesthetics of the Natives without so much as acknowledging their contributions, Belvin successfully rewrote the region's origin story in a single year.[xv]

Wild Bill's improbable "triumph" over nature landed his name in the local *News-Press* as well as the more broadly-read men's magazine *True*. Journalists marveled at Belvin's eccentric representation of the man returned to nature, commenting on his matted beard and tan skin, and calling him the "Lee County Robinson Crusoe."[xvi] While these stories mostly amount to folksy kitsch, the comparison to Daniel Defoe's shipwrecked protagonist is actually rather fitting. Both Crusoe and Belvin's severance from society in favor of self-reliance reflected what early capitalist thinkers saw as the first

step in the shift towards primitive accumulation. Even if it forced him to eschew modernity for a time, Belvin's stunt could be read as a bellwether of progress and was particularly useful to local boosters hoping to capitalize on Florida's reputation as a potential Garden of Eden. A mere two decades after Wild Bill's year in the woods, the "invisible hand" of the marketplace would finally alight on his untapped wilderness, infusing the Gulf Coast with outside investment and transforming the land and water itself into salable commodities once and for all. As Belvin's publicity stunt garnered attention from afar and improved the business prospects of local boosters like newspaper editor P.J. Bentz, Adam Smith smiled up from below.[xvii]

By the mid-forties and the end of World War II, macro-scale forces contributed to this growth as well, as the US economy began to shift its interest towards not just consumer production, but the projection of middle-class prosperity and capitalist virtue across the globe. The country's population exploded during this time, creating unprecedented housing demand and stoking new interest in the development of Sun Belt locales like Florida. Federal housing subsidies helped (mostly white) Americans afford single-family homes for the first time, and this led developers nationwide to look further afield for available land. Florida offered them huge tracts of subtropical acreage at low prices with few restrictions on how or where one could build. No Environmental Protection Agency or State Department of Environmental Protection existed at the time, and the foremost regulatory body of the era - the Florida Land Sales Board - was comprised of developers with little incentive to restrict their own industry. The presence of over a thousand miles of oceanfront property in the state excited investors, and as with the Disston land sale a half century before, government officials invited the conversion of huge tracts of submerged lands into housing or agricultural production.[xviii]

The earliest residential development in the Caloosahatchee River/ San Carlos Bay area began in the mid-1940s on the northern tip of San Carlos Island (Ft. Myers Beach) and the area around Gordon Pass (north of Naples), where a developer named John Glen Sample used dredge-and-fill techniques to construct the neighborhood of Port Royal. Taking their cues from earlier US Army Corps of Engineers work in the channels and inlets of the surrounding bay, Sample and other visionaries began to utilize barge-

mounted dredges and bulldozers to alter the shape of the region's coastline, often without so much as a permit requirement to slow them down. They built access channels for recreational boaters "at Hendry's Creek (Deep Lagoon), at Iona Cove, and at Punta Rassa Cove (present-day Connie Mack Island)" with the aims of facilitating non-commercial navigation of the area's waterways and accommodating the growing leisure demands of a postwar middle class.[xix]

While Sample's efforts allowed for modest growth and the construction of a more "usable" waterfront, the most ambitious (and ultimately destructive) visions for the region sprang from the minds of two brothers from Maryland in the 1950s. Leonard and Jack Rosen had accumulated capital by running cosmetics and advertising companies in Baltimore and New York City, and first caught onto the Florida land buzz while vacationing in Miami. Upon discovering that certain areas of the state could be bought wholesale and that few developers were advertising nationally, the two admen recruited a rag-tag team of fellow investors, including a boxer-turned-restaurateur and a dentist, and formed the Sandy Investment Company (later renamed Gulf American Corporation).[xx] At the suggestion of Leonard's doctor who, just like Dr. Frank Miles, had retired to Southwest Florida for the supposedly restorative qualities of its climate, the group decided upon 1,724 acres along the southeastern edge of the Caloosahatchee River. Coincidentally, they bought the property from the heirs of Dr. Miles himself for $678,000, and Cape Coral was born.[xxi]

But the potential that Leonard Rosen saw in the land around Redfish Point was not its regenerative warmth or other supposed health benefits. He considered the site "useless" in its current condition, and planned to create his own version of the waterfront that would bear the mark of modernity instead of timeless antiquity, and better suit the values of mid-century consumers.[xxii] To better reflect tropical preconceptions of Florida, for example, landscaping crews ripped out existing vegetation and planted non-native palm trees along new streets with names like Flamingo Drive and Chiquita Boulevard. Before the first piece of steel broke the earth, the Rosens had already designed a yacht club, golf course, rose gardens, and tourist attractions that were "planned to match your fondest dreams."[xxiii] They advertised recreation as the centerpiece of life in Cape Coral, with fishing,

boating, and sunbathing at the center of Gulf American's magazine and television advertisements. Years before Walt Disney converted pasture and orange groves into a "Magic Kingdom," the Rosens promised their audience a neighborhood moonlighting as a tourism mecca, claiming that Cape Coral would offer unparalleled opportunities for family friendly, outdoor leisure. To the Rosens, Florida's environment was a product in and of itself.[xxiv]

To create such wonders, however, the slate first had to be wiped clean. This monumental task required a fleet of industrial earthmovers. Gulf American enlisted three dredges named the Sandy, the Vetner, and the Oliver Douglass, as well as over $100,000 of other construction equipment and, in 1959, the grand renovation commenced.[xxv] As Cynthia Barnett explains, "Gulf American ignored Florida's new dredge-and-fill laws," passed in 1957, "and scooped millions of cubic yards of fill from the Caloosahatchee River without permits."[xxvi] The company then constructed temporary dams to control the water flowing between the river and the open ocean and carved an angular system of waterways into the underlying sediment. By dredging the bed of the estuaries to create finger canals, Gulf American made good on the promise of "waterfront" property, maximizing the number of lots with gulf access while simultaneously obtaining much-needed fill material. In the early days of construction, the dredges worked night and day, exhuming sediment at over 100 cubic meters per hour and piling it up to meet the five-foot-six-inch minimum elevation required in the building code.[xxvii]

Above the surface, construction crews attempted to recast material that had been lying submerged for centuries as a base for verdant suburban lawns. But with little of the nutrients normally found in organic humus, this dredged material failed to support the growth of vegetation. If the Rosens had only looked at the monopoly held by Red Mangroves around them, they might have realized this. Instead, they placed sod on top of shell bits and demanded it grow. When this failed, landscapers and residents spread fertilizers onto their lawns, wicking sulfates and phosphates into the porous limestone and the aquifer below. Such methods accelerated the pollution of the hydrologic cycle and displayed a complete misunderstanding of the relationship between plants and the soil.

By the end of the development's first year, the company had completed a dozen canals and eight houses near the future site of the yacht club. The visions of paradise they promoted contrasted starkly with the landscape made by so much demolition and earthmoving, but advertising acumen proved effective in securing advanced sales from homebuyers nonetheless. New infusions of capital from down payments enabled Gulf American to buy up even more land on the peninsula, and the dream of Cape Coral continued to grow. As increasingly distant pinelands were drawn into the master plan, the machine moved farther into the garden and before long, every part of the Cape became a target for improvement.[xxviii]

The aggressive approach taken by the Rosens towards the existing environment was an extension of their business drive, which related every detail to the point of sale. Bulldozers struggled to keep up with the frenetic pace of lot sales "[scraping] the property clear of vegetation… [while] survey crews were already at work staking out the boundaries of canals and road rights of way."[xxix] When dredgers discovered a valuable deposit of marl beneath a cul-de-sac, Gulf American simply relocated the affected lots and used the marine limestone beneath to build Del Prado Boulevard, Cape Coral's main thoroughfare. This mined-out area was then shaped and filled with water to create an eerie cluster of perfectly geometric lakes, which survive today as an example of capitalist improvisation and expose what environmental historians call "second nature" as merely an afterthought of development.[xxx]

Enabled by the success of their promotional campaigns, Gulf American pumped almost all of its proceeds right back into advertising. The company bought its own fleet of Cesna airplanes and offered potential buyers a free flight from Miami and a night's stay in a "LUXURY MOTEL" (emphasis in original).[xxxi] Once they took to the sky for their "air tour" of the community, however, customers must have wondered if their pilot was lost. Where they expected to see palm trees, blue waters, and tropical beaches, they saw a dreary landscape, gouged clean of any vegetation or natural features. At most, a particularly determined pine tree might still jut out from the gray, mechanically-graded topsoil. Viewed from above, the drab scenery resembled the exact opposite of the paradise that Gulf American was selling, and while

the Corporation's stock prices continued to rise, a clear disconnect between the dream and reality began to emerge.[xxxii]

These discrepancies did not hamper the Rosen's optimistic portrayal of their progress, and Gulf American continued to push the limits of hyperbole and the environment alike. The brothers counted on mass media to outrun word of mouth, and used their connections in New York to get Cape Coral on TV, giving away homes on game shows like *The Price is Right* and bringing in celebrities like Bob Hope to help convince audiences that the waterfront wonderland was all it claimed to be. In 1964, they finally opened the community's rose garden, perhaps the most expensive marketing scheme of all. This attraction was much more than the hundred or so rose bushes the company planted at its epicenter. By pouring over three acres of concrete on the sand to the west of the yacht club, Gulf American built idyllic representations of nature, complete with a porpoise arena, Polynesian and hanging gardens, and the Waltzing Waters jeux d'eau, a lighted fountain on steroids. Each recast nature as a form of entertainment. Combined with a "Hall of Patriots," a miniature Mount Rushmore, and a life-sized statue of the flag planting at Iwo Jima, this odd mixture of simulated nature and nationalism were designed to pander to families and recipients of VA home loans in tandem. By the mid-sixties, their bold approach to advertising had made Gulf American the largest land development firm in Florida.[xxxiii]

Just as Gulf American completed the rose gardens, however, the housing market began to slow down and the Rosens' sales numbers sputtered. Having focused more on advertising than building, their waterfront wonderland contained more empty lots than residents, and dissatisfied customers began to complain of misleading sales pitches or the slow rate at which retail and leisure opportunities materialized. Due in large part to the cost of advertising and promotional schemes, the affordable payments of twenty dollars a month that customers sent in were no longer enough to keep the company in the black. The Rosens began selling the same property to more than one buyer in the hopes that each would arrive at different times, when a simple switch could be made. This practice was intended to buy the construction crews time to divest new plots of plant and animal life and maintain the appearance of continued success, but in time, exposed Leonard and Jack Rosen to increasing levels of criticism. The brothers, especially Leonard, became

more and more scarce on site, spending most of their time in New York and Miami.

Before long, lawsuits against Gulf American began to appear in the newspaper, with angry homeowners and swindled investors charging everything from insider trading to false advertising.[xxxiv] Even the typically inactive Florida Land Sales Board began looking into in the activities of the company.[xxxv] After over two years of proceedings, the state handed down judgment against the Rosens, requiring their resignation as chairmen and stripping Gulf American of its license to sell land in Florida for thirty days. While this should have amounted to a slap on the wrist, the thin margin of error created by the Rosens' fast-and-loose business approach dealt a crushing blow to their real estate ventures and the company never recovered. [xxxvi] In 1970, after undergoing heart surgery and battling thoughts of suicide, a disgraced Leonard Rosen offered a candid glimpse into his conception of Cape Coral and the world around him, declaring, "there are so many things I want to do, want to conquer."[xxxvii] Such language demonstrates plainly the posture of domination that Rosen and Gulf American had brought with them to Southwest Florida.[xxxviii]

In the absence of meaningful environmental regulation, it took unethical business practices to doom the Rosens. But very soon after Gulf American went under, an awakening in environmental activism, led by citizen-activists like Rachel Carson and Lois Gibbs, shifted attitudes about human impacts on the ecosystem nationwide. In Southwest Florida, this zeitgeist added a new barrier for developers who might have otherwise scrambled to claim the Rosen's market share. Following the creation of the Environmental Protection Agency in 1970, for example, certain methods of earth-moving and construction that developers in Florida had become accustomed to faced government oversight for the first time. Dredge-and-fill operations came under the disciplinary jurisdiction of state and government officials, who offered newfound resistance to the exploitative ambitions of housing developers. Legislation like the Clean Water Act of 1972 stressed the need for greater conservation and regulation of Florida's waterways. But in Cape coral, the damage had already been done. Its waterways had been polluted by runoff and chemically altered by lock systems and canal dredging, and

by 1972, "less than one per cent of Cape Coral was covered by foliage," contributing to decreased wildlife habitat and increased water pollution due to soil runoff. According to one of the area's early environmental writers, "as a result of the canal system's construction, a shallow freshwater aquifer was destroyed and wildlife and fish nurseries have disappeared."[xxxix]

Such shifts in public consciousness brought new attention to the plight of animals and wildlife habitats in Estero Bay as well, inspiring local action for the first time during the 1970s. The Endangered Species Act of 1973 helped redefine the criteria of a healthy ecosystem, and within Florida, the burrowing owl and the manatee were designated a State Species of Special Concern.[xl] Under section 6 of the act, both federal and state offices adopted new regulations of human/animal interactions, and limited the acquisition and development of protected land, water, or other interest "to the maximum extent practicable." Such reforms highlighted the impact of development on vulnerable animals, and the owl population in Cape Coral, which had once been amongst the largest in the US, received at least some form of official advocacy. But delegating responsibility and ensuring implementation of reform procedures were subsequently plagued by jurisdictional confusion, loose constructionist loopholes, or economically-inspired skepticism. As we shall see, little was ultimately done to restrict human interference with owls in developed parts of the region.[xli]

One factor that actually did help species like the owl reclaim some of their previous habitat during this time was the reduction of human activity. In Gulf American's absence, the peninsula entered a strange new period of stagnation, as other companies who initially looked to capitalize on Gulf American's collapse met with financial struggles and logistical burdens of their own. Subsequent projects like Rotunda West, a pie-shaped neighborhood or "community in the round" just north of the Cape promised customers "32 miles of navigable, blue-green waterways well-stocked with freshwater fish," but never reached its sales goals and sputtered after dredging 11 miles of canals and erecting nearly 600 homes. Within Cape Coral itself, a glut in housing combined with two recessions served to further slow construction across the peninsula between the early 1970s and the mid -1990s, leaving much of the waterfront wonderland half-completed on the banks of the Caloosahatchee.[xlii]

During this time, large parts of Cape Coral sat unfinished and abandoned. Parking lots and retail spaces fell into disrepair, and Gulf American's flashy corporate pavilion on Del Prado Boulevard was vacated and demolished. At the Cape's southern edge, the porpoise arena and the bronze statutes in the hall of heroes rusted and bleached in the moist, sunlit air. The Iwo Jima statue and most of the bronze busts were removed to prevent vandalism, but not before someone made off with John F. Kennedy's head. In a newspaper article from 1973, former Gulf American executive Paul Sanborn took a reporter through the once-gleaming attraction's shuttered-up remnants, explaining how even the plywood that had been used to close up broken windows had been carried off by vandals.[xliii]

For lifeforms that could adapt to these eerie, half-built landscapes, however, the vacant lots and irregular occupation of the community created an opportunity. Non-native species of plants and animals thrived in the relative absence of humans and established their own strongholds in the abandoned environment. The golf course quickly reverted to something resembling the prairie it had replaced, and the grand display of the rose garden withered into dilapidation on the banks of the river. Its reflecting pool dried up and then filled again with rainwater, and the concrete structures surrounding it took on the cracks of advancing tree roots. Here, amidst handrails oxidizing in the shadow of a weed-covered miniature Mount Rushmore, Cape Coral seemed to be disappearing back into nature, and the contest between humans and the environment looked poised for a reversal of fortunes. Like the wildlife of Chernobyl's exclusion zone, the plants and animals of the Gulf Coast overcame immense trauma in the 1970s, reclaiming spaces and nutrients stolen from them by human activity and rebuilding their populations in the spaces left behind.[xliv]

Unfortunately, it was into this setting that the first Nile monitors, most likely brought to Florida for the pet trade, liberated themselves from captivity. Using the peninsula's feeder canals as a thoroughfare, these amphibious fugitives became acquainted with the mixed ecosystem around them and began a stealthy assault on local wildlife. Well-maintained waterways created what one study called "invasion corridors," and served to dissolve the barriers that might have otherwise slowed the spread of monitors or other pests across the peninsula. Although it is difficult to pinpoint exactly when the

first monitors escaped, residents reported over 150 monitors sightings per year by the early 1990s, suggesting that the lizards were reproducing in the wild.[xlv] The presence of this new predator compounded the threat to the native ecology already posed by habitat loss. With their four-inch claws and powerful forearms, monitors easily ripped into owls' shallow dens, and could wipe out an entire generation of the birds in one meal. By the mid-1990s, the combination of predation and habitat loss had reduced thousands of nesting sites on the peninsula to less than 300.[xlvi]

As the owls ran out of places to go, human residents grew accustomed to seeing the more adaptive of these birds in their front yards, and developed a perception of symbiosis. Cape residents assumed that lawnmowers and foot traffic were only minor inconveniences to nesting owls, and the most concerned citizens thought of themselves as the birds' protectors. They formed a community volunteer group to catalog existing burrows, construct artificial dens in front yards, and establish an annual "Burrowing Owl Festival" near the former site of the rose gardens to raise awareness. Studies from the late 1980s and early 1990s showed that indeed, owls seemed to do well in developed areas, although whether they were drawn to the areas because of development or simply adapted to the encroachment of humans was not meaningfully explored. This belief in habituation, or the ability of some animals to live in proximity to humans, guided even the most well-intentioned efforts of citizens to protect the birds. But the creation of artificial burrows on suburban lawns failed to recognize the importance of density and proximity to the burrowing owl's livelihood. As two recent studies on birds in urban environments point out, urbanization tends occur in the same areas as the densest wildlife habitation, and this forced interaction is extremely difficult for many species to overcome. In the case of the burrowing owl, a close clustering of burrows is essential to the birds' defense and reproductive strategies. Without an uninterrupted space to establish warrens that can house hundreds of birds together, the owls lose the collective security they need. What's more, where they do work by providing shelter, the artificial burrows create the potential for dependency upon humans, which is much different than habituation. As one conservation biologist put it, true recovery in ecologically damaged settings "can only be brought about if the developed world decreases its material consumption and makes wiser choices of the things it consumes," including land for housing and coastal recreation sites.[xlvii]

Even these grass roots steps towards conservation, then, people have failed to identify themselves as the root of the problem. Still hampered by the anthropocentric notion that humans can fix nature's shortcomings, faith in artificial burrows deepened man-made interference with the birds' natural behavior patterns and failed to address the real issue of human encroachment into wildlife habitats. The owl festival itself ironically brings hundreds of people to Rotary Park on the southern edge of the Cape to celebrate the bird while simultaneously bringing foot traffic and trash into its refuge. Though their sympathy raises awareness of the birds' plight, community groups also tend to depict the Borrowing Owl as more of a mascot than a wild animal, and instead of emphasizing distance to save the owls, Cape residents have pulled them even tighter. These misconceptions are reflected in the town's policies, as well, as substantive changes to housing bylaws or zoning restrictions that might afford the birds more space have failed to materialize. [xlviii] As it stands today, Cape Coral allows homes to be built as close as ten feet from the opening of owl dens, and apart from the breeding season, dens can even be destroyed to facilitate expansion. According to the Cape Coral Friends of Wildlife, "property owners who feel their ability to utilize their yards has been compromised by a burrow may…apply for a permit" that will "allow the burrow to be destroyed" providing "all chicks have fledged."[xlix]

Efforts to reduce the monitor population have also struggled to gain momentum. In 2002, the City of Cape Coral finally took organized action by enlisting its Environmental Resources Division to trap and eradicate the lizards.[l] By baiting traps with "rotting squid, chicken, and fish," or sometimes poison, officials and research scientists like Todd S. Campbell at the University of Tampa have captured, examined, and euthanized hundreds of individuals. But the lizards are the beneficiaries of millions of years of evolutionary self-interest, and have proven to be adaptable and elusive. The six to nine eggs laid by each breeding couple are more than enough to outpace the efforts of a small cadre of conservationists, and the manmade escape routes provided by canals also complicate the task of extirpation. The monitor now joins renegade pythons, disease carrying giant snails, and a host of other invasive pests in a multi-flank assault on Florida's native ecology.[li]

Ultimately, the one thing that might have helped abate both problems was the creation of protected wild spaces, or "third nature," within the

undeveloped or abandoned portions of the Cape. But in the early 2000s, Southwest Florida's housing market experienced a rebirth. The number of people living on the peninsula tripled between 1990 and 2010, and have continued to grow in the decade since. Such rapid growth has placed unprecedented strain on the biodiversity, air quality, and water quality of the Cape, which now represents one of the worst examples of ecological degradation in the state. Annual estuary report cards taken in the waters surrounding Southwest Florida since 2005, especially in the area around Redfish Point, has received the lowest average scores amongst the 10 distinct regional zones examined. The same reports also note that of the forty percent of original wetlands that remain intact, only seven percent are currently in public conservation.[lii] Increasing demand for irrigation and drinking water in the area has placed an unsustainable burden on the aquifers beneath this portion of the state and, during the last twenty years, serious questions have emerged about the ecosystem's ability to supply a burgeoning populace with clean, naturally replenished drinking water, despite the success of groundwater initiatives elsewhere in the state.[liii] Rather than sparking a change in attitudes towards resource use, such concerns have devolved into political battles over water rights that simply perpetuate the idea that nature is something one can possess. Beginning in the late 1990s, Cape residents began lobbying; not for more efficient and responsible water usage, but for new, independent wells that would untether the Cape from Ft. Myers's water system and provide further deregulation of water use some viewed as necessary for the city's new golden age.[liv]

As the example of Cape Coral illustrates, anthropocentric conceptions of the environment have affected the lives of owls, monitors, and virtually every other component of the coastal ecosystem in complex ways. The environmental burden of the housing boom has been great, and without action to curb its ongoing transgressions, will undoubtedly worsen. As the brief return of nature during the 70s and 80s shows, nature is not passive, and when given the chance to reclaim or recalibrate, can prove surprisingly resilient. But where the environment is able to rebound from the trauma of human intervention, it can only do so one plant tendril, one rain droplet, one clutch of eggs at a time. The damage done by the initial phase of construction on Cape Coral in the short span of a decade would

take centuries of uninterrupted recovery to reverse, and the resumption of construction and population growth in the wake of the 2008 recession put and end to this phase of recovery. As of 2020, the Cape boasts 400 miles of canals and over 204,000 residents. The human compulsion to reshape the land has not abated, and even with the advent of ecological regulations and restoration projects, humans continue to tether their concern for the environment itself to its economic value, whether that means housing sales or tourism.[lv]

In this way, the Rosens' dream of transformation lives on. Through sheer persistence and the resurgence of housing demand, the inheritors of Gulf American's master plan have resumed the task of replacing nature with neighborhoods along the banks of the Caloosahatchee River. In recent years, Cape Coral looks as much like the advertisements as ever, but this actualization has come at the expense of the estuaries, groundwater, and animal life that once served as its initial draw. The monitor has also found its own version of paradise in the waterfront wonderland of Cape Coral, having been carried halfway around the globe by our impulse to own nature and then unwittingly unleashed by suburban ambivalence. Its success stands out as a potent reminder of the human imagination's limitations as well as its accomplishments, and even in the attempt of citizen activists and wildlife officials to reverse such outcomes, the lesson of anthropogenic intervention and the pitfalls of viewing nature as something humans can "fix," have yet to sink in.

NOTES

i Amongst the major themes in post-war American society exhibited by the efforts and advertisements of Cape Coral's developers are mass consumerism, suburban ideals of cleanliness and order, and the notion of leisure as a vital component of middle-class life. For more on this transition in American culture, see Lizabeth Cohen, *A Consumer's Republic: The Politics of Mass Consumption in Postwar America* (New York: Vintage 2003), 194, 252; for more on postwar Florida in particular, see Gary Mormino, *Land of Sunshine, State of Dreams* (Gainesville, FL: University Press of Florida, 2008).

ii For more on the introduction and ecological impacts of pigs into Florida and beyond, see Fred A. White, "Her-nando De Soto Archaeology and

Artifacts" (Tallahassee, FL: Florida Department of State, Bureau of Archaeological Research, Master Site File MR03538, 2010), 7; John Mayer and I. Lehr Brisbin, Eds. *Wild Pigs in the United States: Their History, Comparative Morphology, and Current Status* (Athens: University of Georgia Press, 2008); Gerald T. Milanich, "Hernando de Soto and the Expedition in Florida: An Overview," *Florida Anthropologist* 42, no. 4, December 1989; Garcilaso de la Vega Florida of the Inca (Austin: University of Texas Press, 2010), 44. While the burrowing owl has received less attention from scholars than other invasive species in Florida, there is much more available on wild boar and pythons. For more on these invasive species and their impact on Florida today, see Wood, Gene W., and Reginald H. Barrett. "Status of Wild Pigs in the United States." *Wildlife Society Bulletin* (1973-2006) 7, no. 4 (1979): 237-46; Brown, Larry N. "Elimination of a Small Feral Swine Population in an Urbanizing Section of Central Florida," *Florida Scientist* 48, no. 2 (1985), 120-23; Massei, Giovanna, Sugoto Roy, and Richard Bunting, "Too Many Hogs?: A Review of Methods to Mitigate Impact by Wild Boar and Feral Hogs," *Human-Wildlife Interactions* 5, No. 1 (2011): 79-99; Carla Dove, et al., "Birds Consumed by the Invasive Burmese Python (Python Molurus Bivittatus) in Everglades National Park, Florida, USA," T*he Wilson Journal of Ornithology* 123, no. 1 (2011), 126-31; Falk, Bryan G., Ray W. Snow, and Robert N. Reed. "Prospects and Limitations of Citizen Science in Invasive Species Management: A Case Study with Burmese Pythons in Everglades National Park." *Southeastern Naturalist* 15 (2016), 89-102; Frank Mazzotti et al., "Implications of the 2013 Python Challenge® for Ecology and Management of Python Molorus Bivittatus (Burmese Python) in Florida." *Southeastern Naturalist* 15 (2016): 63-74.

iii On the relationship between economic development and the environment in North America's colonial borderlands, see William Cronon, *Changes in the Land* (New York: Hill and Wang, 1983; Elinor K. Melville, *A Plague of Sheep* (Cambridge: Cambridge University Press, 1994); Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (Cambridge: Cambridge University Press, 1986).

iv As writer Cynthia Barnett explained, Florida "became the last sanctuary in the eastern United States for egrets and herons, threatened with extinction during the Gilded Age because of a fashion craze for plum-decorated hats," but by midcentury, even the "moving clouds" of birds

that had called the everglades home were on the brink of annihilation. See Cynthia Barnett, *Mirage: Florida and the Vanishing Water of the Eastern US* (Ann Arbor: University of Michigan Press, 2007), 15. See also Stuart McIver, *Death in the Everglades: The Murder of Guy Bradley, America's First Martyr to Environmentalism* (Gainesville, FL: University Press of Florida, 2018); Jack E. Davis, *Everglades Providence: Marjory Stoneman Douglas and the American Environmental Century* (Athens, GA: University of Georgia Press, 2013), 182-194.

v For some examples of laudatory retrospectives on development in Florida, see H. G. Cutler, *History of Florida Past and Present, Historical and Biographical* (Chicago: Lewis Pub. Co, 1923; David Leon Chandler, *Henry Flagler: The Astonishing Life and Times of the Visionary Robber Baron Who Founded Florida*. (New York: Mac-millan, 1986); Edward Akin, Flagler: Rockefeller Partner and Florida Baron (Gainesville: University Press of Florida, 1992); *Our Story of Gulfport, Florida* (Gulfport, FL: Gulfport Historical Society, 1985); Seth Bramson, *From Farms and Fields to the Future: The Incredible History of North Miami Beach* (Charleston, SC: History Press, 2009). For more on the role that both boosterism and development strategies have had in shaping the sun-shine state, see R. Bruce Stephenson, *Visions of Eden: Environmentalism, Urban Planning, and City Building in St. Petersburg, Florida, 1900-1995* (Columbus: Ohio State University Press, 1997); David Dodrill, *Selling the Dream* (Tuscaloosa: University of Alabama Press, 1993); T.D. Allman, *Miami: City of the Future* (Gainesville: University Press of Florida, 2013); Christopher Knowlton, *Bubble in the Sun* (New York: Simon and Schuster, 2020); Michael McDonough, "Selling Sarasota: Architecture and Propaganda in a 1920s Boom Town," *The Journal of Decorative and Propaganda Arts* 23 (1998): 11-31. For more on development and the environment in the twentieth century, see Jack E. Davis, *An Everglades Providence*, 110, 262, 300; Craig Pittman, Matthew Waite, Ray-mond Arsenault, and Gary M. Mormino. Eds., *Paving Paradise: Florida's Vanishing Wetlands and the Failure of No Net Loss*. (Gainesville: University Press of Florida, 2010); Barnett, Mirage, 13-18.

vi For more on the role of non-human animals in human understandings of the environment, and specifically, the history of human awareness of our own ecological damage, see Harriet Ritvo, "Animal Planet," *Environmental History* 9, no. 2 (Apr., 2004), 204-220; and Nathaniel Wolloch, "Animals

in Enlightenment Historiography" *Huntington Library Quarterly* 75, no. 1 (March 2012), 53-68. R. Bruce Stephenson, *Visions of Eden*, 1, 5-6.

vii From their earliest arrivals on the North American continent, Europeans have applied possession-based notions of mastery and improvement onto the land, and thought of animals -particularly wildlife—as things to be controlled and, if possible, profited from. See William Cronon, *Changes in the Land* and Nathaniel Wolloch, "From Symbols to Commodities: The Economization of Animals in the Transition to Modernity" in *The Enlightenment's Animals: Changing Conceptions of Animals in the Long Eighteenth Century* (Amsterdam: Amsterdam University Press, 2019), 173-174, 196-197. In one particularly telling example of unhelpful "conservation efforts," the Cape Coral Friends of Wildlife's website explains how human disruption of owl burrowing sites has reduced one the largest warrens in the area to a single burrow, and yet, directly beneath this paragraph about gawkers' negative impact on the owl population, the group provides a link to a map displaying "suggested sites to search for them yourself." https://ccfriendsofwildlife.org/burrowing-owl/ Accessed September 1, 2020.

viii Richard Landon Stanford, "Nutrient Cycling in a South Florida Mangrove Ecosystem," (M.S. Thesis, University of Florida, 1976), 4-12, 157-160; Raymond W. Schaffranek, *The Tides and Inflows in the Mangroves of the Ever-glades: Interdisciplinary Project of the South Florida Ecosystem Program* (Reston, Va.: U.S. Geological Survey, 2001), 1-2.

ix The growth and proliferation of semi-sedentary, non-agricultural native settlements in South Florida has been traced to about 13,000 years ago, at the dawn of a period anthropologists call the Dalton Horizon (from between 11,000 and 9,000 years ago). During this time the Caloosahatchee River was the southernmost point along the peninsula where the water discharged from rivers was fresh enough to drink. Below the present site of Cape Coral, the environment became hypersaline and therefore, was less populated than the coastal region to the north. For more on the archaeology and distribution of the Calusa and their predecessors in Southwest Florida during this time, see Randolph Widmer, *The Evolution of Calusa: A Nonagricultural Chiefdom of the Southwest Florida Coast*. (Tus-caloosa, AL: University of Alabama Press, 1988), 61-61, 190-276. For more on the Seminole inhabitants who moved into the region during the 18th century, see Clay MacCauley,

The Seminole Indians of Florida (Gainesville, FL: University Press of Florida, 2000). For a succinct description of the Aboriginal inhabitants of Florida and their relationship with the state's various ecosystems and Euroamerican encroachment during the colonial and early American periods, see Davis, *An Everglades Providence*, 35-37.

x Report of the Commissioner of the General Land Office (Washington, D.C.: U.S. Government Printing Office, 1882), 390-400. For more on the development in Florida during the early 20th century, see Craig Pittman, Matthew Waite, Raymond Arsenault, and Gary M. Mormino. Eds., *Paving Paradise: Florida's Vanishing Wetlands and the Failure of No Net Loss*. (Gainesville: University Press of Florida, 2010), 7-18.

xi T. Frederick Davis, "The Disston Land Purchase." *The Florida Historical Quarterly* 17, no. 3 (January 1939), 206-210. See also Cynthia Barnett, *Mirage*, 13-20; Mark Derr, *Some Kind of Paradise: A Chronicle of Man and the Land in Florida* (Gainesville: University Press of Florida, 1998), 89.

xii Betty Ziess, *The Other Side of the River: Historical Cape Coral* (Self Publication, 1983), 55-57; Pat Molter Emerson, *From Pioneers to Paradise* (Self Publication, 2012), 19-40. William Cronon, *Changes in the Land*, 139, 159-161.

xiii Martha Pickrell, Dr. Miles: *The Life of Dr. Franklin Lawrence Miles, 1845-1929* (Cincinnati, OH: Guild Press of Indiana, 1998), 15-25, 65, 113. Dr. Miles gained his notoriety and wealth as the owner and proprietor of Miles Laboratories, inventors of Alka-Seltzer.

xiv Jean O'Brien, *Firsting and Lasting: Writing Indians out of Existence* (Minneapolis, MN: University of Minne-sota Press, 2010), 6. See also Brian W. Dipple, *The Vanishing American: White attitudes and U.S. Indian policy* (Lawrence: University of Kansas Press, 1982), 2, 84.

xv John Locke, Peter Laslett, Ed., *Two Treatises of Government* (New York: Cambridge University Press, 1963), 388-343. "Wild Bill" Belvin to Return from Year's Voluntary Exile in Florida Woods Next Week." *Fort Myers News-Press*, September 15, 1931. See also an update of Belvin's life amidst the blush of development on the Cape in the 1950s in "Wild Bill Belvin is Adopting City Ways." *Fort Myers News-Press*, August 30, 1954.

xvi "Wild Bill" Belvin to Return from Year's Voluntary Exile in Florida Woods

Next Week." *Fort Myers News-Press*, July September 15, 1931. *True Magazine*, July 1950.

xvii For more on the use of Robinson Crusoe as an allegory for man's return to a more natural state of being and his subsequent mastery of the physical landscape and political economy alike, see Karl Marx, *Capital: A Critique of Political Economy* (New York: Modern Library, 1906), 88. For more on the business angle of Belvin's year in the woods, see Cynthia Williams "5 Things: 'Wild Bill" Belvin lived up to nickname before there was Cape Coral." *Fort Myers News Press*, November 28, 2018.

xviii David E. Dodrill, *Selling the Dream* (Tuscaloosa: University of Alabama Press, 1993), 242; Jack E. Davis, *An Everglades Providence*, 440-455.

xix Gustavo A. Antonini, et al., *A Historical Geography of Southwest Florida Waterways, Vol. 2: Placida Harbor to Marco Island* (Venice, FL: Sea Grant Florida and the West Coast Inland Navigation District, 2002), 28-30.

xx The Rosens were later sued by their investment partners for what amounted to insider trading, having misrepresented the value of company shares in order to convince the partners to sell, giving the brothers a much larger share of the profits from new lot sales. *Baumel v. Rosen*, United States District Court D, Maryland, February 29, 1968.

xxi Dodrill, *Selling the Dream*, 25; *Miami Herald Tropic*, December 3, 1967.

xxii *Fort Myers News-Press*, Sunday August 13, 2000.

xxiii *Saturday Evening Post*, February 4, 1961, August 8, 1964.

xxiv Dodrill, *Selling the Dream*, 1, 13. *The Cape Coral Sun* (Fall 1964), 2. Rose Gardens Brochure, Gulf American Corp, 1962.

xxv "Hard Working Lady Named Sandy," *Fort Myers News-Press*, October 13, 1960; "Pioneer Dredge Moving Out," *Fort Myers News-Press*, January 20,1977.

xxvi Barnett, *Mirage*, 27; See also Don Ruane, "Cape Stiffens Water Rules," *News Press*, March 1, 2005.

xxvii One cubic meter is close to 220 gallons of water or 3500 lbs of soil which gives us some idea of the frenzied pace of construction. McLellan, T. N., Havis, R. N., Hayes, D. F., and Raymond, G. L., "Field studies of

sediment resuspension characteristics of selected dredges," Technical Report HL-89-9 (Vicksburg, MS: U.S. Army En-gineer Waterways Experiment Station, 1989); Dodrill, *Selling the Dream*, 31.

xxviii M. A. Lewis, D. E. Weber, R. S. Stanley, and J. C. Moore, "Dredging impact on an urbanized Florida bayou: effects on benthos and algal-periphyton." *Environmental Pollution*, Vol. 115, No. 2 (2001), 161-171. Habitat loss is just one of the factors that impact birds' ability to survive in urban environments. Others include noise, air pollu-tion, the reduction of food sources, and of course, predation by both pets and introduced species. For more, see Henrik Brumm and Diego Gil, *Avian Urban Ecology: Behavioural and Physiological Adaptations* (Oxford Univer-sity Press, 2014), 3-6.

xxix Dodrill, *Selling the Dream*, 38.

xxx See aerial photos in Appendix A.

xxxi Gulf American Advertisement, The Saturday Evening Post, February 4, 1961.

xxxii See aerial photos in Appendix B.

xxxiii Dodrill, *Selling the Dream*, 161.

xxxiv *Cape Coral Sun*, February 1962; Promotional material, Gulf American Corporation, 1962 (courtesy of Cape Coral Historical Society). The ad for the rose gardens, which was mailed out to prospective buyers, bears a subtitle that reads "to be one of the most alluring spots in Florida!" and sun-shaped inset that proclaims "under construction."

xxxv "Gulf American Corp," *New York Times*, Apr 15, 1968.

xxxvi Dodrill, *Selling the Dream*, 161-164.

xxxvii *Cape Coral Breeze*, November 5, 1979.

xxxviii Dodrill, *Selling the Dream*, 243.

xxxix Betty Price, "City has Time to Correct Problems Cause by Little Awareness," *Fort Myers News-Press*, March 22, 1978. As one writer put it, "urbanization embodies one of the most dramatic and irreversible human transformations of natural ecosystems. Whether development

by humans means the covering-up of plants and soil by impervious materials like steel and concrete, or the replacement of pre-existing natural spaces by gardens, lawns, or other anthropogenic appromiations of nature." See M.L. Mckinney, "Urbanization, biodiversity, and conservation," *Bioscience* 52 (2002), 883–890 and "Urbanization as a major cause of biotic homogenization," *Biological Conservation* 127 (2006), 247–260.

xl According to the Endangered Species Act of 1973, the term "Species of Special Concern" includes any native plant species or any native non-harvested wildlife species documented by scientific research and inventory to have a naturally restricted range or habitat in the state, to be at a low population level, to be in such high demand by man that its unregulated taking would be detrimental to the conservation of its population or has been extirpated from the state. Endangered Species Act, 16 U.S.C. 1531-1544, 87 Stat. 884.

xli "Yes! You Can Build: Building on a Low with a Burrowing Owl Present," Cape Coral Friends of Wildlife web-site, 2012. http://www.ccfriendsofwildlife.org/yes-you-can-build/; Bradley J. Gruver, et al. "Florida's Endangered and Threatened Species List," Division of Habitat and Species Conservation, Florida Fish and Wildlife Commis-sion, 2013, 6.

xlii Gustavo A. Antonini, et al., *A Historical Geography of Southwest Florida Waterways*, 50-52. For more on the decline in housing and other sectors of the US economy during the 1970s and 1980s, see Thomas H. Oatley, *A Political Economy of American Hegemony: Buildups, Booms, and Busts* (New York: Cambridge University Press, 2015); *Federal Home Loan Bank Board, Federal Home Loan Bank Board Journal* Volume 13. Issue 4 (1980), 19-25. For more on the ecology of spaces abandoned by humans and how nature reclaims vacant lots in particular, see Matthew F. Vessel and Herbert H. Wong, *Natural History of Vacant Lots* (Berkeley: University of California Press, 1987) and Colin Fisher, *Urban Green: Nature, Recreation, and the Working Class in Industrial Chicago* (Chapel Hill: University of North Carolina Press, 2015).

xliii *Fort Myers News-Press*, November 4, 1973.

xliv For more on animal recovery in spaces abandoned by humans, see

Sarah Webster, et al, "Where the wild things are: influence of radiation on the distribution of four mammalian species within the Chernobyl Exclusion Zone," *Frontiers in Ecology and the Environment* 14, no. 4 (May 2016), 185-190; Nigel Williams, "Chernobyl: Life Abounds Without People." *Science* 269, no. 5222 (1995), 304; GalvÃ¡n, Ismael, Andrea Bonisoli-Alquati, Shanna Jenkinson, Ghanem Ghanem, Kazumasa Wakamatsu, Timothy A. Mousseau, and Anders P. MÃ¸ller. "Chronic Ex-posure to Low-dose Radiation at Chernobyl Favours Adaptation to Oxidative Stress in Birds." *Functional Ecology* 28, no. 6 (2014), 1387-403. Of course, not all species handle such trauma and contamination the same. For more on the plants and animals that have not fared as well in the exclusion zone, see MÃ¸ller, Anders Pape, Florian Barnier, and Timothy A. Mousseau. "Ecosystems Effects 25 Years after Chernobyl: Pollinators, Fruit Set and Re-cruitment." *Oecologia* 170, no. 4 (2012), 1155-165; MÃ¸ller, A. P., and T. A. Mousseau. "Determinants of Inter-specific Variation in Population Declines of Birds after Exposure to Radiation at Chernobyl." *Journal of Applied Ecology* 44, no. 5 (2007): 909-19; and MÃ¸ller, A. P., T. A. Mousseau, G. Milinevsky, A. Peklo, E. Pysanets, and T. SzÃ©p. "Condition, Reproduction and Survival of Barn Swallows from Chernobyl." *Journal of Animal Ecology* 74, no. 6 (2005), 1102-111.

xlv Kevin M. Enge, et al. "Status of the Nile Monitor (Varanus Niloticus) in Southwestern Florida," *Southeastern Naturalist*, Vol. 3. Issue 4 (2004), 571-582.

xlvi Ibid., 578-580.

xlvii "Burrowing Owl festival draws crowd," *Fort Myers News Press*, February 16, 2008. For data on the owl popu-lations of Cape Coral and South Florida in general, see Hubert Stround and Mary Kilmer, "Preserving Habitat for Athene cunicularia floridana (Florida Burrowing Owl): Challenges and Solutions from Cape Coral, Florida, USA." *Urban Naturalist*. Number 19 (2018); Brian A. Millsap and Cindy Bear, "Density and Reproduction of Burrowing Owls along an Urban Development Gradient." *The Journal of Wildlife Management* 64. no. 1 (2000), 33-41 and Brian Keith Mealey, "Reproductive Ecology of the Burrowing Owl, Athene Cunicularia Floridana, in Dade and Broward Counties, Florida." (Thesis, Florida International University, 1992). For more on the importance of density to owls and other wildlife, as well as a brief overview of theories about habituation, see Gil and Brumm, *Avian Urban*

Ecology : Behavioural and Physiological Adaptations (Oxford: Oxford University Press, 2014), 5-8, 44-48 and Enrique Murgui and Marcus Hedblom, eds. *Ecology and Conservation of Birds in Urban Environments* (Cham, Switzerland: Springer, 2017). On the use of waterways by invasive species, see Bella S. Galil, Stefan Nehring, and Vadim Panov, "Waterways as Invasion Highways – Impact of Climate Change and Globalization" Chapter 5 in W. Nentwig (Ed.) *Biological Invasions* (Berlin: Springer-Verlag, 2007); David Ehrenfeld, "The Lessons of Valdez," *Conservation Biology* 4, No. 1 (Mar., 1990), 1-2.

xlviii For other examples of conservation efforts that have backfired because of perhaps well-intentioned human intervention, see Irene Pé Rez, André S Gimé Nez and André S Pedreño "Impacts of Exurban Sprawl: The Effects of the Perceptions and Practices of New Residents Toward the Spur-Thighed Tortoise (Testudo graeca)" *Wildlife Society Bulletin* 36, no. 3 (September 2012), 531-537. For a history of the commodification of animals, see Nathaniel Wol-loch, "From Symbols to Commodities: The Economization of Animals in the Transition to Modernity," Chapter 11 in T*he Enlightenment's Animals: Changing Conceptions of Animals in the Long Eighteenth Century* (Amsterdam: Amsterdam University Press, 2019), 173-174, 195-199.

xlix James A. Rogers, Jr., Ed., *Rare and Endangered Biota of Florida, Vol. V: Birds* (Gainesville, FL: University Press of Florida, 1996), 582-585. See images of artificial owl burrow in Appendix C; "Yes! You Can Build: Build-ing on a Low with a Burrowing Owl Present," Cape Coral Friends of Wildlife website see also Brian A. Millsap and Cindy Bear. 2000. "Density and Reproduction of Burrowing Owls along an Urban Development Gradient," 33-41. Nathaniel Wolloch has described humans' concern for animals' decline as motivated more by exploitation than by any conception of wildlife as our equal fellow animals. See Nathaniel Wolloch "Animals in Enlightenment His-toriography," *Huntington Library Quarterly*, Vol. 75, No. 1 (March 2012), 55.

l Cape Coral Environmental Resources Division Nile Monitor Brochure, http://www.capecoral.net/department/public_works/docs/Nile_Monitor_Brochure.pdf.

li Todd S. Campbell, "Eradication of Introduced Carnivorous Lizards from

the Cape Coral Area." Charlotte Harbor National Estuary Program Fiscal Year 2003 Research and Restoration Partners Fund Final Report (2005), 3-11. Monitors also experience habituation in their own way, growing accustomed to the anthropogenic environments in which they have no natural predators besides humans. See Kenta Uchida et al, "Decreased vigilance or habituation to humans? Mechanisms on increased boldness in urban animals," *Behavioral Ecology* 30, no. 6 (2019), 1583–1590.

lii "5 Things to Know about Cape Coral's Demographics," *Fort Myers News-Press*, February 14, 2019, accessed via: https://www.news-press.com/story/news/local/cape-coral/2019/02/14/5-things-know-cape-corals-current-demographics/2838189002/; for fuller demographic statistics and a categorical breakdown by demographic and dec-ade, see World Population Review, https://worldpopulationreview.com/us-cities/cape-coral-fl-population and 2014-2018 and U.S. Census Bureau, American Community Survey 5-year Estimates, https://data.census.gov/cedsci/table?q=S0101&g=1600000US1210275&tid=ACSST5Y2018.S0101. For more on Cape Coral's water quality scores, see Conservancy of Southwest Florida, "Estuaries Report Card for Southwest Florida: Full Technical Report for years 2005-2011," accessible online at www.conservancy.org. These reports are published by the Conservancy of Southwest Florida, and measure estuarine health by measuring the loss of wetlands, conservation lands, mangroves, sea grasses, and the presence of indicator species such as oysters and spotted sea trout.

liii "Cape Coral in Hot Water," *Fort Myers News-Press*, November 30, 1988. For more on the relationship between population growth and water use in the state, see Richard Marella, 2020, Water withdrawals, uses, and trends in Florida, 2015: U.S. Geological Survey Scientific Investigations Report 2019–5147 and Water Use in Florida, 2005 and Trends 1950–2005, Florida Department of Environmental Protection, Florida Water Management District, https://pubs.usgs.gov/fs/2008/3080/.

liv City of Cape Coral Public Works Department. 2006. "Cape Coral Canals: A Public Conference on Water Quality and Quantity" 2006, 3.

lv U.S. Census Bureau, *State and County Quickfacts: Cape Coral, Fl*, Retrieved February 2, 2021 from https://www.census.gov/quickfacts/capecoralcityflorida. See also World Population Review, https://worldpopulationreview.com/us-cities/cape-coral-fl-population and 2014-2018