life bridge pam torres

When I was a child and winter came to a close, I'd gaze out my window watching intently for the first leaf bud to burst. This was long before I understood time or cycles. I wanted to "see" the first day of spring, the exact moment nature began to surrender to the transformation of a new season. In the fall it was the same. Certain I could see the first hint of autumn, that first leaf that turned from green to orange, red or yellow, I'd intently watch every tree. Later, I learned how the shorter days signal the trees to shut down their leafy food factories, leaving glucose trapped in the leaves. Touched by cool autumn nights and sunlight each tree paints its own leafy masterpiece. That knowledge hasn't destroyed the magic of the process and I still find myself straining to see that first piece of evidence. Of course, I can't actually identify when the change begins, that's not the point. The magic occurs as I become absorbed by their beauty, the composition of the whole, a blending of color, either multiplying green in spring or the rich tones of autumn. It is during these journeys into nature's canvass that I find myself questioning my place in the composition, our place as human beings in a grander design.

an mas

Drawn by the break in precipitation and the promise of the coming spring, I venture out again to find evidence, the changing of the guard as winter retreats. Along the Puyallup River, the pungent smell of mud mixed with salt water creates heaviness in the air when the tide is out. High tide rushes in from the bay, up the river and spills out onto the mudflat. This tidal dependent wetland is a complicated intersection of diverse environments located on the north shore of the Puyallup just before it empties into Commencement Bay in Tacoma, Washington. They call it the Gōg-lē-hī-tō, a Puyallup Indian name meaning "where land and waters meet."

The mouths of rivers have always been the center of any community. This area is the gathering place for ocean life, waterfowl, vegetation, small animals, and man, all in competition for the same land, all clamoring for a their spot on

the waterway. As the dominant species, our explosive growth, the construction of homes and businesses, has almost destroyed the lifeblood of this area. This once rich river delta that supplied vital feeding and breeding resources has now been consumed in commercial pursuits for financial gain. Only recently have we questioned the long term price, and predominantly only in terms of the effect it has on human life. Can natural and urban environments blend? Or is it too late? Is the possibility of building a bridge, a connection to the land, lost in the currents of time and progress?

I like to sit on the north levee, upriver from the Lincoln Avenue Bridge. From this vantage point I can easily watch for water foul, dipping and diving into the river, perching on the bridge or heading inland for the marsh. Today there's a crisp breeze coming off the river. It's a good thing; trucks are backed up today across the bridge and the exhaust would be nauseating if the air was static. The bridge itself is an impressive piece of construction. There are two large cement pilings rising from the bottom of the river on which the base of the bridge is anchored. The light green steel girders engineered at angles to create stability are an architectural masterpiece of human ingenuity. The heavy semi-trucks shake the bridge slightly as they rumble across, but not enough to disturb the rock doves as they sit along the top girder.

These gray chunky birds, commonly called pigeons, are also found in cities and farms, nesting anywhere they can find a covered flat surface. Often pairs will form long term bonds and raise as many as five broods a year. The male gathers the nesting material, while the female builds the nest. Together they will incubate two eggs. Then after they hatch, both parents will feed their young "pigeon milk," from their gullets until they are ready to leave the nest.

One of the doves swoops down from one of the girders and lands in a nearby patch of grass, then flies back with a twig or piece of brush held tightly in his small beak. He carefully maneuvers up and through the crisscrossing supports to an intermediate perch, where he turns his body around so he can fly up through a small opening in the top brace of the bridge. Almost immediately he descends again to find another twig, building his home of woven brush.

Until 1906, the White River, glacier water from Mt. Rainier, ran into the

Green River. That year a debris jam diverted it into the Puyallup. Throughout the next year levee building and dredging were used to further realign the Puyallup to minimize the flooding. The levees were built using brush mats that were woven on a catamaran, a simple raft made of logs tied together. The mats were then set into place with rocks which helped to stabilize the new banks, protecting homes and businesses from flood damage at the expense of wetland habitat.

There is constant tension between these two worlds, natural and urban, all the time maneuvering their existence within their environment through adaptation. This interplay, a dance that is often led by industry, began with the convergence at the estuarial waters of the port.

The port has been the center of industrial growth ever since Job Carr claimed his land and built his small log cabin along Commencement Bay in 1863. It's difficult to picture this area as it must have been when he saw it, long before the mills, years before industry: rich fertile delta, large evergreens reaching towards the sky, lush undergrowth of ferns and grasses, and in season, salmon crowding up the river to spawn. It's been said that the runs were so plentiful they raised the water level of this great tributary.

I peer into the dark Puyallup, hoping to see the flash of a swishing tail, or the sleek body of a Chum or Chinook holding against the current. There aren't any. They will come in the fall. In seasons past, I have watched numbers of native salmon fighting upstream in the Satsop and Wynoochee Rivers, at the steps of the Orting Hatchery or Ballard Lock's, and each time I've been amazed at their strength, determination and grace.

Beside me on the bank there is one lone cedar that has grown on the levee serving as look-out for Northwestern crows (much smaller than the common American crow). While they seem like scrappy trouble makers, they're actually quite ingenious. They are usually the first ones out on the mudflat, poking around for any aquatic creatures or invertebrates, seabird eggs, shellfish or even fish that the tide may have left. Although I haven't witnessed it myself, I understand that they will drop hard-shelled clams, mussels and snails on rocks or roads to break them open. They even store these morsels during low-tide in dry places so that during high tide they will have food to eat. The crows, dependent on this tidal habitat, are evidence that aquatic life is flourishing.

Only twenty years have passed since the hole through the levee was punched to let the water flow back over the newly recovered mudflat. Before the hole was punched, truckloads of debris left by the Tacoma City dump through the 40's and 50's, had to be removed. It's only been in the last forty years that attention has been given to the impact our attitude of consumption has cost us. The National Environmental Policy Act passed in 1969, but it took another eleven years before the first soil testing of the port was performed after the waterways were appointed to the Federal Superfund list in 1981. Today, there are almost two million yards of contaminated sediments with toxic chemicals left in our waterways, enough to fill the Tacoma Dome four times.

A sign by where I like to sit, on the edge of the river, asks people to stay on the trail to avoid disturbing the habitat, and the next line warns that wandering off the trail may be hazardous to your health, a sad commentary on the realities of the construction on this site.

When I first learned of the tide-flats, I wasn't sure what people were talking about. When I realized that they were referring to one of the busiest ports on the coast; the same place where I'd watched smoke rise from refinery stacks; where orange dinosaur-like cranes lifted containers from ships and where I'd repeatedly sat in my car waiting for a never ending train; I was very surprised. This place didn't reflect the natural phenomenon that an estuarial tide-flat conjured in my mind. I'd driven by this place for almost twenty years, each time holding my breath because of the "Aroma of Tacoma"— a term left to us from the days of the copper smelter. Now the air is a mix of refinery smoke, pulp processing, and seawater, so heavy in the air I can smell it all the way to my house in Milton. Picturing it as a thriving river delta was difficult. All I knew was that it was caked with industrial dirt, painted with big company money and carpeted in cement. So you can imagine my astonishment to find a wetland nestled in the middle of all the bustle of commerce.

On my first visit to the river, the whistles, chirps and songs of the birds were barely audible above the roars of trucks transporting goods brought in by the ships to the port. That's different now. My ears have learned to tune out the rumble and focus on specific parts of this cacophony. I've documented at least seven different bird songs: barn and house swallows, rough-winged swallow, American goldfinch, red-winged blackbird, starling and the killdeer. The small plain-colored killdeer's song has a distinctive melancholy tone that floats above the chatter of the rest, a seemingly perfect accompaniment to the natural vs. urban dilemma.

Last week, I watched as two double-crested cormorants paddled against the current as if they were trying to avoid going under the bridge. Their bodies sat low in the water, their black tail feathers half submerged and then suddenly, they would dive beneath the water, disappear for almost a minute, and then pop back up a few feet from where they went down. Their bills are long and hooked at the end, an adaptation that helps them forage on the river bottom. They're dependent on the bounty that the incoming tide brings into the river and they are not alone, over ninety-two species of birds that have been officially documented since the wetland was restored.

One evening on another visit just before dusk, I found myself caught in the middle of a busy feeding frenzy; wildlife had surrounded me. Emerging from a clump of wiggling and writhing yellow fuzz, freshly hatched gypsy moth caterpillars were perched on a small shrub. Looking closer, I saw that many had left the clump and were now scattered among the small branches, nibbling at the leaves. Walking further, I began batting at gnats and other flying feasts for the birds. Swooping swallows, red-winged blackbirds, sparrows, and a few American goldfinches were not only singing for their supper, but were flying, hopping and flitting from branch to branch. I realized that over the last few weeks I had witnessed a miraculous transformation, a return to life.

Only a month ago, monochromatic hues of brown and beige would have described this place. Evidences of summer left in a dried effigy: brown remains of yellow yarrow, long stems balancing straw flower seed pods, petrified blackberries clinging to bare thorny vines. The only visible wildlife then was the black feisty crows, sparring on the mudflat.

A few gnats and a mosquito buzz annoyingly at my face forcing me back to the present. As I stop in mid-swat, I remember that it is their existence that insures that the baby salmon will have the protein diet they need to grow to maturity.

Shortly after construction, and again each year, samples have been drawn, tests conducted, infauna (small aquatic life that live in the soft bottom) sampled and wildlife documented, charting the growth of this newly formed natural habitat. The main purpose for its creation was to preserve a declining salmon population. Their natural spawning environment and nursery had been filled by years of industrial building. During the first year samplings revealed that juvenile salmon were entering the wetland, as well as many freshwater species, twenty-two species in all. It will take decades to recover what we so carelessly destroyed through our consumption.

Scanning along the levee on the edge of the Puyallup, beginning under the Lincoln Avenue Bridge, then moving my eyes up river to where salt and fresh water pour over the mudflat and around the edges of the marshy habitat, evidence of the changing season, a return of life is imminent. The once brown grasses and reeds have given way to new green shoots; formerly stark brown branches of nearby trees are now in full glory with their rustling green leaves. Baby goslings in a mound of golden down warm themselves in a huddle on the muddy bank. Their parents stand guard with an occasional nudge or nod.

The wind is whipping through the trees today, tossing the branches and their leaves like kites on a string. The crows are dominating the skies, soaring and diving in between wild fits of social flapping and pecking. At one point eight of them were perched on the weathered fence at the end of the road until one single crow dived and they all split off in different directions.

Out on the mudflat, a couple of gadwalls grub along the bottom, tipping their tail feathers towards the sky and back again. One lone female mallard duck is being courted by four males, their iridescent green heads flashing in the sunlight as they flap their wings displaying blue flight feathers. The plain brown female seems to be annoyed and she darts away, only to be confronted by another male.

On a wispy shrub at the edge of the river a stout Savannah sparrow clings to a slim branch, swaying with the wind. His small head twitches back and forth showing off a white bandit's mask painted across his dark beady eyes. The wind ruffles his speckled breast feathers exposing the soft white down close to his body. Below him, the slow methodical Puyallup shows signs of the rising tide, miniature whirlpools caused by the clash of salt water pushing against the current of the river. My eyes follow the muddy surface to the bridge where slow steady streams of trucks pass through the heavy green braces. The movement of the water, juxtaposed against the flow of trucks creates a sense of cooperative harmony—a symphonic orchestration combining these two worlds.

Sitting here on the levee, just above the bridge, I've watched red-tailed hawks circle on thermals overhead and great blue herons swoop in for a late morning brunch. Sometimes, I can almost forget that behind me Maers/Sealand, the largest shipping line in the world, has its terminal and container storage just steps away. This process of mitigation for lost habitat is a new frontier, a frontier less about claiming ownership and more about stewardship. I don't know if this blending of urban and natural environment is possible, the balance seems so precarious at times. But, I do think it's worth the effort. It may require us to deconstruct the meaning of success and reevaluate the costs of our current lifestyle choices. Places like the Gōg-lē-hī-tō stimulate these questions that have to be asked and answered, constructing a bridge of life between us and the world we inhabit.