

Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants

By Robin Wall Kimmerer

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Excerpts by Barbara Keating, December, 2020

Backcover: As a botanist Robin Wall Kimmerer has been trained to ask questions of nature with the tools of science. As a member of the Citizen Potawatomi Nation, she embraces the notion that plants and animals are our oldest teachers. ... brings these lenses of knowledge together to show that the awakening of a wider ecological consciousness requires the acknowledgement and celebration of our reciprocal relationship with the rest of the living world. ¶ "... takes us on a journey ... every bit as mythic as it is scientific, as sacred as it is historical, as clever as it is wise (Elizabeth Gilbert). ¶ "... shows how the factual, objective approach of science can be enriched by the ancient knowledge of the indigenous people. (Jane Goodall) ”

I. Planting Sweetgrass

Skywoman Falling

Page 7: (Comparing Skywoman of Indigenous cultures and Eve of Biblical Genesis) Same species, same earth, different stories. Like Creation stories everywhere, cosmologies are a source of identity and orientation to the world. They tell us who we are. We are inevitably shaped by them no matter how distant they may be from our consciousness. One story leads to the generous embrace of the living world, the other to banishment. One woman is our ancestral gardener, a cocreator of the good green world that would be the home of her descendants. The other was an exile, just passing through an alien world on a rough road to her real home in heaven.

Page 9: In the public arena, I've heard the Skywoman story told as a bauble as colorful "folklore." But, even when it is misunderstood, there is power in the telling. ... Can they (students), can we all, understand the Skywoman story not as an artifact from the past but as instructions for the future?

The Council of Pecans

Page 13: Nuts are like the pan fish of the forest, full of protein and especially fat – "poor man's meat," and they were poor. Today we eat them daintily, shelled and toasted, but in the old times they'd boil

them up in a porridge. The fat floated to the top like a chicken soup and they skimmed it and stored it as nut butter: good winter food. High in calories and vitamins – everything you needed to sustain life. After all, that's the whole point of nuts: to provide the embryo with all that is needed to start a new life.

The Gift of Strawberries

Page 31: How, in our modern world, can we find our way to understand the earth as a gift again, to make our relations with the world sacred again? I know we cannot all become hunters-gatherers – the living world could not bear our weight – but even in a market economy, can we behave "as if" the living world were a gift?

An Offering

Page 34: Tahawus is the Algonquin name for Mount Marcy, the highest peak in the Adirondacks. It's called Mount Marcy to commemorate a governor who never set foot on those wild slopes. Tahawus, "the Cloud Splitter," is its true name, involving its essential nature.

Page 37: Much of who I am and what I do is wrapped up in my father's offering by the lakeshore. Each day still begins with a version of "here's to the gods of Tahawus," a thanksgiving for the day. My work as an ecologist, a writer, a mother, as a traveler between scientific and traditional ways of knowing, grows from the power of those words. It reminds me of who we are; it reminds me of our gifts and our responsibility to those gifts. Ceremony is a vehicle for belonging – to a family, to a people, and to the land.

Asters and Goldenrod

Pages 41-42: In moving from a childhood in the woods to the university I had unknowingly shifted between worldviews, from a natural history of experience, in which I knew plants as teachers and companions to whom I was linked with mutual responsibility, into the realm of science. The questions scientists raised were not "Who are you?"

but “What is it?” No one asked plants, “What can you tell us?” The primary question was “How does it work?” The botany I was taught was reductionist, mechanistic, and strictly objective. Plants were reduced to objects; they were not subjects. The way botany was conceived and taught didn’t seem to leave much room for a person who thought the way I did. The only way I could make sense of it was to conclude that the things I had always believed must not be true after all.

Page 44: To walk the science path I had stepped off the path of Indigenous knowledge. But the world has a way of guiding your steps. ... (invited to gathering of Native elders to talk about traditional knowledge of plants.) ... ¶ I realized how shallow my understanding was. ... To a new Ph.D., this was humbling. It was the beginning of my reclaiming the other way of knowing that I had helplessly let science supplant. I felt like a malnourished refugee invited to a feast, the dishes scented with the herbs of home.

Learning the Grammar of Animacy

Page 48: *To be native to a place we must learn to speak its language.* ¶ ¶ Listening in wild places, we are audience to conversations in a language not our own. I think now that it was a longing to comprehend this language I hear in the woods that led me to science, to learn over the years to speak fluent botany. A tongue that should not, by the way, be mistaken for the language of plants. I did learn another language in science, though, one of careful observation, an intimate vocabulary that names each little part. To name and describe you must first see, and science polishes the gift of seeing. I honor the strength of the language that has become a second tongue to me. But beneath the richness of its vocabulary and its descriptive power, something is missing, the same something that swells around you and in you when you listen to the world. Science can be a language of distance which reduces a being to its working parts; it is a language of objects. The language scientists speak, however precise, is based on a profound error in grammar, an omission, a grave loss in translation from the native languages of these shores.

Pages 54-5: (Ojibwe or Anishinabemowin language dictionary) ... way too many variations on a single word ... Pages blurred and my eyes settled on a word

– a verb, of course: “to be a Saturday.” *Pfft!* I threw down the book. Since when is *Saturday* a verb? Everyone knows it’s a noun. I grabbed the dictionary ... and all kinds of things seemed to be verbs: “to be a hill,” “to be red,” “to be a long sandy stretch of beach,” ... “to be a bay.” “Ridiculous!” I ranted in my head. ... ¶ And then I swear I heard the zap of synapses firing. ... In that moment I could smell the water of the bay, watch it rock against the shore and hear it sift onto the sand. A bay is a noun only if the water is dead. When *bay* is a noun, it is defined by humans, trapped between its shores and contained by a word. But the verb *wiikwegamaa* – *to be a bay* – releases the water from bondage and lets it live. “To be a bay” holds the wonder that, for this moment, the living water has decided to shelter itself between these shores, conversing with cedar roots and a flock of baby mergansers. ... To be a hill, to be a sandy beach, to be a Saturday, all are possible verbs in a world where everything is alive. Water, land, and even a day, the language a mirror for seeing the animacy of the world, the life that pulses through all things, through pines and nuthatches and mushrooms. *This* is the language I hear in the world; this is the language I hear in the woods; this is the language that lets us speak of what wells up all around us.

II. Tending Sweetgrass Maple Sugar Moon

Page 67: People of the Maple Nation made sugar long before they possessed trade kettles for boiling. Instead they collected sap in birch bark pails and poured it into log troughs hollowed from basswood trees. The large surface area and shallow depth of the troughs was ideal for ice formation. Every morning, ice was removed, leaving a more concentrated sugar solution behind. The concentrated solution could then be boiled to sugar with far less energy required. The freezing nights did the work of many cords of firewood, a reminder of elegant connections: maple sap runs at the one time of year when this method is possible.

Witch Hazel

(Memoir about a friendship with an older neighbor, Hazel, and the value of witch hazel.)

A Mother’s Work

(Memoir about buying a house with seven acres and the work to make pond and gardens into their home.)

The Consolation of Water Lilies

Page 98: (daughter going to college) I had known it would happen from the first time I held her – from that moment on, all her growing would be away from me. It is the fundamental unfairness of parenthood that if we do our jobs well, the deepest bond we are given will walk out the door with a wave over the shoulder.

Page 103: (kayaking on a lake when missing her daughter and appreciating water lilies) The earth, that first among good mothers, gives us the gift that we cannot provide ourselves. I hadn't realized that I had come to the lake and said *feed me*, but my empty heart was fed. I had a good mother. She gives what we need without being asked. ... "Thanks" I whispered, "for all of this."

Pages 103-4: (Cousin left gifts with a note, "Take comfort," after daughter left home) My fairy god mother left eighteen notes and presents, one for every year of mothering (daughter) Larkin. A compass: "To find your new path." A packet of smoked salmon: "Because they always come home." Pens: "Celebrate having time to write." ¶ We are showered every day with gifts, but they are not meant for us to keep. Their life is in their movement, the inhale and the exhale of our shared breath. Our work and our joy is to pass along the gifts and to trust that what we put out into the universe will always come back."

Allegiance to Gratitude

(Essay: exegesis of *Haudenosaunee Thanksgiving Address Greetings to the Natural World*; full text: https://americanindian.si.edu/environment/pdf/01_02_Thanksgiving_Address.pdf)

Pages 107-115: This ancient order of protocol sets gratitude as the highest priority. The gratitude is directed straight to the ones who share their gifts with the world. ¶ *We have been given the duty to live in balance and harmony with each other and all living things. ... We are thankful to our Mother the Earth, for she gives us everything that we need for life. ¶ We give thanks to all of the waters of the world ... ¶ We turn our thoughts to all of the Fish life in the waters. ... ¶ Now we turn toward the vast fields of Plant life. ... ¶ we honor and thank all the Food Plants we harvest from the garden, especially the Three Sisters who feed the people with such*

abundance. ... ¶ Medicine Herbs of the world ... ¶ ... we see all the Trees ... who each have their own instructions and uses. ... ¶ send our greetings and thanks to all the beautiful animal life.... They have many things to teach us as people. ... ¶ thank all the birds who move and fly about over our heads. The Creator gave them the gift of beautiful songs.... remind us to enjoy and appreciate life. ... ¶ We are all thankful for the powers we know as the Four Winds. We hear their voices in the moving air as they refresh us and purify the air we breathe. They help to bring the change of seasons. ¶ ...the West where our grandfathers the Thunder Beings live. ... ¶ to our eldest brother the Sun.... ¶ to our oldest Grandmother, the Moon, who lights the nighttime sky.... ¶ give thanks to the Stars... ¶ thank the enlightened Teachers.... ¶ We now turn our thoughts to the Creator, or Great Spirit, and send greetings and thanks for all the gifts of Creation....

III. Picking Sweetgrass Epiphany of the Beans

Pages 121-2: *It came to me while picking beans, the secret of happiness. ¶ This is why I made my daughters learn to garden – so they would always have a mother to love them, long after I am gone.*

Page 123: Now, the plant scientist who sits at my desk and wears my clothes and sometimes borrows my car – she might cringe to hear me assert that a garden is a way that the land says, "I love you."

Page 124: (in a graduate writing workshop on relationships to the land) The students all demonstrated a deep respect and affection for nature ... a place where they experienced the greatest sense of belonging and well-being.... That they loved the earth. And then I asked them, "Do you think that the earth loves you back?" No one was willing to answer that ... They backed slowly away. Here was a room full of writers, passionately wallowing in unrequited love of nature. ¶ So I made it hypothetical and asked, "What do you supposed would happen *if* people believed this crazy notion that the earth loved them back?" The floodgates opened. They all wanted to talk at once. ... ¶ One student summed it up: "You wouldn't harm what gives you love."

Page 126: People often ask me what one thing I would recommend to restore relationship between

land and people. My answer is almost always, “Plant a garden.” It’s good for the health of the earth and ... for the health of people. ... nurturing connection.

The Three Sisters

(Benefits of traditional companion planting of corn, beans and squash explained scientifically, nutritionally and otherwise.)

Page 132: Their layered spacing uses the light, a gift from the sun, efficiently, with no waste. The organic symmetry of forms belong together; the placement of every leaf, the harmony of shapes speak their message. Respect one another, support one another, bring your gift to the world and receive the gifts of others, and there will be enough for all.

Page 133: But there is one thing they all need that is always in short supply: nitrogen. That nitrogen should be the factor that limits growth is an ecological paradox: fully 78% of the atmosphere is nitrogen gas. The problem is that most plants simply can’t use atmospheric nitrogen. They need mineral nitrogen, nitrate or ammonium. The nitrogen in the atmosphere might as well be food locked away in full sight of a starving person. ... one of the best ways (to transform that nitrogen) is named “beans.” ¶ Beans are members of the legume family, which has the remarkable ability to take nitrogen from the atmosphere and turn it into usable nutrients.

Pages 137-8: The genius of the Three Sisters lies not only in the process by which they grow, but also in (their) complementarity.... the Three Sisters also form a nutritional triad that can sustain a people. Corn ... superb form of starch. All summer corn turns sunshine into carbohydrate, so that all winter, people can have food energy. ... beans are high in protein and fill in the nutritional gaps left by corn. ... But neither beans nor corn have the vitamins that squash provide in their carotene-rich flesh.

Page 139: The Three Sisters offer us a new metaphor for an emerging relationship between Indigenous knowledge and Western Science, both of which are rooted in the earth. ... corn as traditional ecological knowledge, the physical and spiritual framework that can guide the curious bean of science, which twines like a double helix. The squash creates the ethical habitat for coexistence and mutual flourishing.

Wisgaak Gokpenagen: A Black Ash Basket

Page 144: Traditional harvesters recognize the individuality of each tree as a person, a nonhuman forest person. Trees are not taken, but requested. Respectfully, the cutter explains his purpose and the tree is asked permission for harvest. Sometimes the answer is no. It might be a cue in the surroundings – a vireo nest in the branches, or the bark’s adamant resistance to the questioning knife...

Page 148: John (Basket weaver teacher) keeps to the tradition of the Honorable Harvest: take only what you need and use everything you take.

Page 152: (John) “Just think of the tree and all its hard work before you can start.... It gave its life for this basket, so you know your responsibility. Make something beautiful in return.” ¶ Responsibility to the tree makes everyone pause before beginning. Sometimes I have that same sense when I face a blank sheet of paper. For me, writing is an act of reciprocity with the world; it is what I can give back in return for everything that has been given to me.

Page 154: (Baskets) remind me of the years of a tree’s life that I hold in my hands. What would it be like ... to live with that heightened sensitivity to the lives given for ours? To consider the tree in the Kleenex, the algae in the toothpaste, the oaks in the floor, the grapes in the wine; to follow back the thread of life in everything and pay it respect? ... you begin to feel yourself awash in gifts.

Mishkos Kenomagwen: The Teachings of Grass (Scientific experiment on harvesting; findings: the control field without harvesting did more poorly than those with either type of harvesting.)

Page 158: ... compare the effects of the two harvest methods ... an experiment is a kind of conversation with plants: I have a question for them, but since we don’t speak the same language, I can’t ask them directly and they won’t answer verbally. ... Plants answer questions by the way they live, by their responses to change; you just need to learn how to ask. ... Experiments are not about discovery but about listening and translating the knowledge of other beings.

Page 164: With a long, long history of cultural use, sweetgrass has apparently become dependent on humans to create the “disturbance” that stimulates its compensatory growth. Humans participate in a symbiosis in which sweetgrass provides its fragrant blades to the people and people, by harvesting, create the conditions for sweetgrass to flourish.

Page 166: ... the relationship between plants and humans must be one of balance. People can take too much and exceed the capacity of the plants to share again. ... “never take more than half.”

Maple Nation: A Citizenship Guide

Page 169: Both of my parents have been active in their town government for years, so I’ve seen how stewardship of a community happens. “Good communities don’t make themselves,” my dad said. “We’ve got a lot to be grateful for, and we all have to do our part to keep it going.”

Page 172: (Maple sap harvester) “Of course sugaring is a gamble every year. It’s not like you can control the sap flow. Some years are good and some aren’t. You take what you get and be grateful for it. It all depends on the temperature, and that’s out of our hands.” But that’s not entirely true anymore. Our addiction to fossil fuel and current energy policies accelerate carbon dioxide inputs every year, unequivocally causing a global rise in temperatures. Spring comes nearly a week earlier than it did just twenty years ago.

Pages 173-4: Maples face a grave enemy. The most highly regarded models predict that the climate of New England will become hostile to sugar maples within fifty years.... Rising temperatures will reduce seedling success and regeneration will thereby start to fail. It is already failing. Insects will follow, and the oaks will get the upper hand. ¶ ... maples will become climate refugees. To survive they must migrate northward to find homes at the boreal fringe. Our energy policy is forcing them to leave. They will be exiled from their homelands for the price of cheap gas. ¶ We do not pay at the pump for the cost of climate change, for the loss of ecosystem services provided by maples and others. Cheap gas now or maples for the next generation? ¶ ... we get the government we deserve. ... (Maples) deserve you and me speaking up on their behalf. To quote our

town council woman, “Show up at the damn meeting.” Political action, civic engagement – these are powerful acts of reciprocity with the land.

The Honorable Harvest

Page 176: I ... confess to ... chlorophyll envy.... I wish I could photosynthesize so that just by being, just by shimmering at the meadow’s edge or floating lazily on a pond, I could be doing the work of the world while standing silent in the sun.

Page 178: (Leeks) “Asking permission ... shows respect for the personhood of the plant, but it is also an assessment of the well-being of the population. Thus I must use both sides of my brain to listen to the answer. The analytic left reads the empirical signs to judge whether the population is large and healthy enough to sustain a harvest, whether it has enough to share. The intuitive right hemisphere is reading something else, a sense of generosity, an open-handed radiance that says *take me*, or sometimes a tight-lipped recalcitrance that makes me put my trowel away.

Page 179: Cautionary stories of the consequences of taking too much are ubiquitous in Native cultures, but it’s hard to recall a single one in English. Perhaps this helps to explain why we seem to be caught in a trap of overconsumption, which is as destructive to ourselves as to those we consume.

Page 180: Collectively, the Indigenous canon of principles and practices that govern the exchange of life for life is known as the Honorable Harvest. They are rules of sorts that govern our taking, shape our relationships with the natural world, and rein in our tendency to consumer – that the world might be as rich for the seventh generation as it is for our own. The details are highly specific to different cultures and ecosystems, but the fundamental principles are nearly universal among peoples who live close to the land. ¶ As a human being who cannot photosynthesize, I must struggle to participate in the Honorable Harvest. So I lean in close to watch and listen to those who are far wiser than I am.

Page 181: (Early colonists were surprised by the plentitude of nature here, that the Indigenous did not harvest all of the rice, and concluded that “much goes to waste.”)

Page 183: The state guidelines on hunting and gathering are based exclusively in the biophysical realm, while the rules of the Honorable Harvest are based on accountability to both the physical and the metaphysical worlds.

Page 184: The dictum to take only what you need leaves a lot of room for interpretation when our needs get so tangled with our wants.

Page 186: (Native only takes one bullet when he goes deer hunting and declines to shoot at most that come in range until he identifies the right one.)

Page 187: Taking coal buried deep in the earth, for which we much inflict irreparable damage, violates every precept of the code. By no stretch of the imagination is coal “given” to us. We have to wound the land and water to gouge it from Mother Earth. ¶ It doesn’t mean that we can’t consume the energy we need, but it does mean that we honorably take only what is given. The wind blows every day, every day the sun shines, every day the waves roll against the shore, and the earth is warm below us. We can understand these renewable sources of energy as given to us, since they are the sources that have powered life on the planet for as long as there has been a planet. We need not destroy the earth to make use of them. Solar, wind, geothermal, and tidal energy – the so-called “clean energy” harvests – when they are wisely used seem to me to be consistent with the ancient rules of the Honorable Harvest.

Page 196: I don’t have much patience with food proselytizers who refuse all but organic, free-range, fair-trade gerbil milk. We each do what we can; the Honorable Harvest is as much about the relationships as about the materials. ... I can make choices because I have the disposable income to choose “green” over less-expensive goods, and I hope that will drive the market in the right direction. In the food deserts of the South Side there is no such choice, and the dishonor in the inequity runs far deeper than the food supply.

IV. Braiding Sweetgrass In the Footsteps of Nanabozho: Becoming Indigenous to Place

Pages 206-7: Some people say that time is a river into which we can step but once, as it flows in a straight path to the sea. But Nanabozho’s people know time is a circle. Time is not a river running inexorably to the sea, but the sea itself – its tides that appear and disappear, the fog that rises to become rain in a different river. All things that were will come again.

Page 208: *Wabunong* – the **East** – is the direction of knowledge. We send gratitude to the East for the chance to learn every day, to start anew.

Page 209: (Nanabozho as an Anishininaabe Linnaeus, the Swedish botanist and zoologist in naming all) ¶ Nanabozho’s footsteps took him next to the **South**, *zhawanong*, the land of birth and growth. From the South comes the green that covers the world in spring, carried on warm winds.

Page 212: In his journey to the **North**, Nanabozho found the medicine teachers. They gave him *Wiingaashk* to teach him the ways of compassion, kindness, and healing, even for those who have made bad mistakes, for who has not? ¶ When Nanabozho came to the **West**, he found many things that frightened him. The earth shook beneath his feet. He saw great fires consume the land. ... Firekeeper himself came to Nanabozho. “This is the same fire that warms your lodge,” he said. “All powers have two sides, the power to create and the power to destroy. We must recognize them both, but invest our gifts on the side of creation.”

Pages 213-4: (Describes welcome immigrant plant) “round-leafed plant: White Man’s Footstep ... *Plantago major* or common plantain. (Uses: edible greens when tender; first-aid poultice when older; seeds provide indigestion medicine.) ¶ (Describes unwelcome immigrant plants) Garlic mustard poisons the soil so that native species will die. Tamarisk uses up all the water. Foreign invaders like loosestrife, kudzu, and cheat grass have the colonizing habit of taking over others’ homes and growing without regard to limits. ... Plantain is not Indigenous but “naturalized.” This is the same term we use for the foreign-born when they become citizens in our

country. They pledge to uphold the laws of the state. They might well uphold Nanabozho's Original Instructions, too.

The Sound of Silverbells

Page 218: The biologist Paul Ehrlich called ecology "the subversive science" for its power to cause us to reconsider the place of humans in the natural world.

Page 222: As an enthusiastic young PhD, colonized by the arrogance of science, I had been fooling myself that I was the only teacher. The land is the real teacher. All we need as students is mindfulness. Paying attention is a form of reciprocity with the living world, receiving the gifts with open eyes and open heart. My job was just to lead them into the presence and ready them to hear.

Sitting in a Circle

Page 229: In some Native languages the term for plants translates to "those who take care of us." Through natural selection the cattails developed sophisticated adaptations that increase their survival in the marsh. The people were attentive students and borrowed solutions from the plants, which increased their likelihood of survival. The plants adapt, the people adopt.

Page 231: Not surprisingly, hunger for this productive land precipitated a 90% loss of the wetlands – as well as the Native people who depended upon them. ... So-called "muck farms" plow under the black soil of drained marshes, and a landscape that once supported some of the world's highest biodiversity now supports a single crop. In some places the old wetlands are just paved over for parking. A true waste of land.

Page 236: Recent research has shown that the smell of humus exerts a physiological effect on humans. Breathing in the scent of Mother Earth stimulates the release of the hormone oxytocin, the same chemical that promotes bonding between mother and child, between lovers.

Burning Cascade Head

Page 251: (Salmon River estuary, Oregon: dams, dikes, cattle production, industrial forestry destroyed Salmon habitat.) Beginning in 1976, the U.S. Forest Service and a host of partner organizations led by

Oregon State University initiated a restoration project for the estuary. Their plan was to remove the dikes and dams and tidegates and once again let the tidal waters go where they were meant to go, to fulfill their purpose. Hoping that the land remembered how to be an estuary, the teams worked to dismantle the human structures, one by one.

Putting Down Roots

(Carlisle Industrial School, forced boarding school for Natives, tried to destroy Native culture just as industry destroyed the land. Sakokwenionkwas aka Tom Porter, Bear Clan working to return Mohawks to their old home along the Mohawk River, to recreate their community and restore the land. Kimmerer plants Sweetgrass.)

Umbilicaria: The Belly Button of the World

Page 272: (Lichen) The fungal/algal symbiosis so blurs the distinction between individual and community ... ¶ Scientists are interested in how the marriage of alga and fungus occurs and so they've tried to identify the factors that induce two species to live as one. But when researchers put the two together in the laboratory and provide them with ideal conditions for both alga and fungus, they gave each other the cold shoulder and proceeded to live separate lives, in the same culture dish, like the most platonic of roommates. ... It was only when (the scientists) severely curtailed the resources, when they created harsh and stressful conditions, that the two would turn toward each other and begin to cooperate. ... ¶ When times are easy and there's plenty ... individual species can go it alone. But when conditions are harsh and life is tenuous, it takes a team sworn to reciprocity to keep life going forward. In a world of scarcity, interconnection and mutual aid become critical for survival. So say the lichens.

Page 275: While lichens can sustain humans, people have not returned the favor of caring for lichens. *Umbilicaria*, like many lichens, is highly sensitive to air pollution. When you find *Umbilicaria*, you know you're breathing the purest air. Atmospheric contaminants like sulfur dioxide and ozone will kill it outright. Pay attention when it departs. ¶ Indeed, whole species and entire ecosystems are vanishing before our eyes in the vanguard of climate chaos.

Old Growth Children

(Mother Cedar, Thuja plicata, the western red cedar. Economist poet Franz Dolp (1936-2004) journals: 1987 Oregon coastal cutover land purchase; planted over 10,000 cedar, fir, and hemlock trees. Co-created Oregon State U Spring Creek Project. <https://andrewsforest.oregonstate.edu/sites/default/files/iter/pubs/pdf/pub4092.pdf>)

Page 281: It's amazing to think that, within the lifetime of those old trees ..., they have gone from being revered to being rejected to nearly being eliminated, and then somebody looked up and noticed they were gone and wanted them again.

Pages 284-5: Industrial forestry, resource extraction and other aspects of human sprawl are like salmonberry thickets – swallowing up land, reducing biodiversity, and simplifying ecosystems at the demand of societies always bent on having more. In five hundred years we exterminated old-growth cultures and old-growth ecosystems, replacing them with opportunistic culture. (Franz journal) “My goal is to plant an old growth forest.”

Page 291: To further this vision, Franz co-created the Spring Creek Project whose “challenge is to bring together the practical wisdom of the environmental sciences, the clarity of philosophical analysis and the creative, expressive power of the written word, to find new ways to understand and reimagine our relation to the natural world.”

Witness to the Rain

Pages 293-4: (Oregon rain; moss) Most other places I know, water is a discrete entity. ... hemmed in by well-defined boundaries: lakeshores, stream banks, the great rocky coastline.... But here in these misty forests those edges seem to blur, with rain so fine and constant as to be indistinguishable from air and cedars wrapped with cloud so dense that only their outlines emerge.

V. Burning Sweetgrass Windigo Footprints

Page 304: The Windigo is the legendary monster of our Anishinaabe people, the villain of a tale told on freezing nights in the north woods. ... ¶ Windigo stories were told around the fire to scare children into safe behavior lest this Ojibwe boogeyman make a

meal of them. Or worse. This monster is no bear or howling wolf, no natural beast. Windigos are not born, they are made. The Windigo is a human being who has become a cannibal monster.

Page 305: But the Windigo is more than a mythic monster intended to frighten children. Creation stories offer a glimpse into the worldview of a people, of how they understand themselves, their place in the world, and the ideals to which they aspire. Likewise, the collective fears and deepest values of a people are also seen in the visage of the monsters they create. Born of our fears and our failings, Windigo is the name for that within us which cares more for its own survival than for anything else.

Page 306: ... multinational corporations have spawned a new breed of Windigo that insatiably devours the earth's resources “not for need but for greed.” The footprints are all around us ...

Page 307: The footprints of the Windigo. ¶ They're everywhere you look. They stomp in the industrial sludge of Onondaga Lake (New York). And over a savagely clear-cut slope in the Oregon Coast range where the earth is slumping into the river. You can see them where coal mines rip off mountaintops in West Virginia and in oil-slick footprints on the beaches of the Gulf of Mexico. A square mile of industrial soybeans. A diamond mine in Rwanda. A closet stuffed with clothes. Windigo footprints all, they are the tracks of insatiable consumption. So many have been bitten. You can see them walking the malls, eying your farm for a housing development, running for Congress. ¶ We are all complicit. We've allowed the “market” to define what we value so that the redefined common good seems to depend on profligate lifestyles that enrich the sellers while impoverishing the soul and the earth.

The Sacred and the Superfund

Pages 312-3: ... nine Superfund sites line the shore of Onondaga Lake (Syracuse, NY). ... Thanks to more than a century of industrial development, the lake ... one of North American's most sacred sites is now ... one of the most polluted lakes... ¶ Today, the land where the Peacemaker walked and the Tree of Peace stood isn't land at all, but beds of industrial waste sixty feet deep.

Page 316: The fish that survive, you may not eat. Fishing was banned in 1970 due to high concentrations of mercury.

Pages 320-2: The Onondaga Nation ... claim ... under United States law, but its moral power lay in the directives of the Great Law: to act on behalf of peace, the natural world, and future generations. (The case was dismissed in 2010 by the federal court.)

Page 326: Waste beds: a new name for an entirely new ecosystem ... “leftover residue” ... “unwanted product of manufacturing, “Wasteland is... land that has been thrown away. ... I wonder how the public perception of the Solvay waste beds would change if, instead of hiding them, we put up a sign along the highway welcoming people to the lakeshore defined as “squandered land covered in industrial feces.”

Page 328: Despair is paralysis. It robs us of agency. It blinds us to our own power and the power of the earth. Environmental despair is a poison every bit as destructive as the methylated mercury in the bottom of Onondaga Lake. ... Restoration is a powerful antidote to despair. Restoration offers concrete means by which humans can once again enter into positive relationship with the more-than-human world, meeting responsibilities that are simultaneously material and spiritual. It's not enough to grieve. It's not enough to just stop doing bad things.

People of Corn, People of Light

(Ancestor stories about humans made of mud, wood, light, corn. Mud, wood, light did not work out well.)

Page 343: (why would) people of corn ... inherit the earth rather than people of mud or wood or light? Could it be that people made of corn are beings transformed? For what is corn, after all, but light transformed by relationship? Corn owes its existence to all four elements: earth, air, fire, and water.

Page 347: (Humans) may not have wings or leaves, but we humans do have words. Language is our gift and our responsibility. I've come to think of writing as an act of reciprocity with the living land. Words to remember old stories, words to tell new ones, stories that bring science and spirit back together to nurture our becoming people made of corn.

Collateral Damage

Page 349: (Iraq War) Collateral Damage: shielding words to keep us from naming the consequences of a missile gone astray. (At the same time as the Iraq invasion, Kimmerer and others worked to save salamanders crossing road to breeding pond.)

Page 354: (Amphibians) one of the most vulnerable groups on the planet. Subject to habitat loss as wetlands and forests disappear, amphibians are the collateral damage we blindly accept as the cost of development... because amphibians breathe through their skin, they have little ability to filter out toxins.

Page 355: The carnage on this dark country road and the broken bodies on the streets of Baghdad do seem connected. Salamanders, children, young farmers in uniform – they are not the enemy or the problem. We have not declared war on these innocents, and yet they die just as surely as if we had. They are all collateral damage. If its oil that sends the sons to war, and oil that fuels the engines that roar down this hollow, then we are all complicit, soldiers, civilians, and salamanders connected in death by our appetite for oil.

Shkitagen: People of the Seventh Fire

Pages 364-7: (Sacred fires) carry prayers, for healing, for sweat lodges... fire represents our life, the spiritual teachings ... ¶ “there's a fire you must tend to every day. The hardest one to take care of is ... Your own fire, your spirit.” ¶ (Anishinaabe) Fires refer to (eras and) places we have lived and the events and teaching that surrounded them. ¶ This story is known as the Seventh Fire Prophecy ... ¶ The era of the **First Fire** found Anishinaabe people living in the dawn lands of the Atlantic shore. ... ¶ **Second Fire** ... shore of Lake Huron ... **Third Fire** ... Manitoulin Island (island in Lake Huron) ... in the country of wild rice. ¶ **Fourth Fire** ... (European immigration) ... first prophet said ... (if they) came in brotherhood, they would bring great knowledge. Combined with Anishinaabe ways of knowing, this would form a great new nation. ... second prophet sounded a warning ... said that what looks like the face of brotherhood might be the face of death ... might come with greed for the riches of our land ... fish became poisoned and the water unfit to drink. ¶ **Fifth Fire** (reservations, boarding schools, old ways lost) ... **Sixth Fire** ... almost ... the cup of grief

Page 368: Seventh Fire (now; reclaim past culture, language, sacred teachings) It tells that all the people of the earth will see that the path ahead is divided. They **must make a choice**.... One ... is soft and green with new grass. The other path is scorched black, hard; the cinders would cut your feet. ¶ We do indeed stand at the crossroads. Scientific evidence tells us we are close to the tipping point of climate change, the end of fossil fuels, the beginning of resource depletion. ... those lifeways, lacking balance, justice, and peace, have not brought us contentment.

Page 371: ... if the people choose the green path, then all races will go forward together to light the eighth and final fire of peace and brotherhood, forging the great nation ...

Defeating Windigo

Page 375: ... rampant destruction wrought by our contemporary Windigo-mind ...

Page 376: The shortage is due not to how much material wealth there actually is, but to the way in which it is exchanged or circulated. The market system artificially creates scarcity by blocking the flow between the source and the consumer. Grain may rot in the warehouse while hungry people starve because they cannot pay for it. The result is famine for some and diseases of excess for others. The very earth that sustains us is being destroyed to fuel injustice. ¶ What is the alternative? And how do we get there?

Epilogue: Returning the Gift

Page 381: Generosity is simultaneously a moral and material imperative, especially among people who live close to the land and know its waves of plenty and scarcity. Where the well-being of one is linked to the well-being of all. Wealth among traditional people is measured by having enough to give away. Hoarding the gift, we become constipated with wealth, bloated with possessions, too heavy to join the dance.

Page 382: The gifts of the earth are to be shared, but gifts are not limitless. The generosity of the earth is not an invitation to take it all. Every bowl has a bottom. When it's empty, it's empty. And there is

but one spoon, the same size for everyone. ¶ (Berries) remind us that all flourishing is mutual.

Page 383: Had we taken only what which is given to us, had we reciprocated the gift, we would not have to fear for our atmosphere today. ¶ We are all bound by a covenant of reciprocity.

Page 384: The moral covenant of reciprocity calls us to honor our responsibilities for all we have been given, for all that we have taken. It's our turn now, long overdue. ... The fierce defense of all that has been given. Gifts of mind, hands, heart, voice, and vision all offered up on behalf of the earth. Whatever our gift, we are called to give it and to dance for the renewal of the world. ¶ In return for the privilege of breath.

A Note on the Treatment of Plant Names

Page 385: (Kimmerer capitalized plants and animals) Capitalization conveys a certain distinction, the elevated position of humans and their creations in the hierarchy of beings. ... This seemingly trivial grammatical rulemaking in fact expresses deeply held assumptions about human exceptionalism, that we are somehow different and indeed better than the other species who surround us. Indigenous ways of understanding recognize the personhood of all beings as equally important, not in a hierarchy but a circle.

Reviews:

<https://www.startribune.com/review-braiding-sweetgrass-by-robin-wall-kimmerer/230117911/>

Her book of wisdom, knowledge and teachings celebrates life that is both ordinary ... and magical, ... The gift of Kimmerer's book is that she provides readers the ability to see a very common world in uncommon ways, or, rather, in ways that have been commonly held but have recently been largely discarded. She puts forth the notion that we ought to be interacting in such a way that the land should be thankful for the people.

<https://www.kirkusreviews.com/book-reviews/robin-wall-kimmerer/braiding-sweetgrass/>

A smart, subtle overlay of different systems of thought that together teach us to be better citizens of Earth.