Who can hear the silence of vanished birdsong? Who can see the absence of rainbow fish in dead coral reefs? The bodies of extinct frogs don’t pile up around our knees. So. We have to press our imaginations (every way we can) to understand what the plain numbers mean—

Since 1970, forty percent of “everything that has the breath of life,” animals and plants, has been erased from the face of the Earth, four out of every ten beings.

The number of *vertebrate animals* has been cut almost in half—
the beasts of the Earth, the birds of the air, the fishes of the seas,
Of these, freshwater fish, frogs, and shorebirds have it the worst.

If you remember 1970,
then you were alive when there were almost twice as many plants and animals, forests and fields, as there are now.
And if you don’t remember,
you have spent your whole life in a world that is half of what it should be -- an impoverished, simplified, drained and bulldozed world.

I will die in a world that is half as abundantly beautiful as the one I was born into. My children will tear out half the pages in their field guides and throw them away. They won’t need them anymore. My grandchildren’s picture books about hippopotami, penguins, and wise old owls will be fantasies.
“It’s our generation that is witnessing the end of the era that we evolved in,” Thomas Berry wrote.
“My generation has done what no previous generation could do, because they lacked the technological power, and what no future generation will be able to do, because the planet will never again be so beautiful or abundant.”

COMPLETE PLAYING THEME
PLAY VARIATION I

In the beginning, there was a yellow glow pouring onto the purple skin of the sea. Rising and sinking in the glare, the seas mixed with the dry land and spilled into the bays. In the shining slick, the Earth brought forth the first life.

Creation worked like music.
Life began with a simple basic theme and repeated it now, again, replicated it now, again, complicated it now, connected it, again, into the lyric chords of all creation.
DNA and the musical structure of the theme and variations display the same powerful, complexifying beauty.
At first, there were sponge-like things, medusas and polyps. Gelatinous themes and all their variations.

. . . And then, unimaginable time later, came the evolution of human consciousness. The theme of life re-organized itself to stand on two legs, turn to the sky, and contemplate its own beginnings and its own end.
We are, Mary Evelyn Tucker says, “beings in whom the universe shivers in wonder at itself.”

Tonight, we celebrate the extraordinary chance that we find ourselves in the Cenozoic Era, when evolution has achieved its greatest fullness of flowering, what theologian Thomas Berry called the most “lyric period in Earth history.”

Imagine our good fortune, to live in the time of thrush-song and thirty thousand species of orchids, the time of microscopic sea angels with tiny wings
and whales that teach each other to sing,
the time of crocodiles and butterflies with curled tongues,
and a bat no bigger than a bee.

**PLAY VARIATIONS II AND III**

The planet is still crammed with lives of urgent striving,
crawling over each other, burrowing into every crack.
The fate of these lives is not a matter of indifference or of economic expediency.
These lives are the irreplaceable consequence of planetary creativity
over four billion years.

Last year, under gathering clouds, I knelt beside a tidepool.
Maybe you have done the same.
Blue mussels paved the rocks, cutting my hand when I turned a stone.

**START PLAYING VARIATION III again, UNDER THIS**

The bottom of the stone was slathered with life – tiny starfish, algae like orange paint, crust-of-bread sponges, porcelain crabs disguised as pebbles, decorator crabs disguised as seaweed, fish disguised as rays of light.
The moving tide was noisy, the harsh inhale and groan.
Scritchting claws and bubbling jaws, a constant plop plop as seawater dripped off globules and tentacles and who knows what.
Behind me, I could hear my small grandsons calling to each other, “Guys! Come. Look and see.”
*And then, out in the inlet, a humpbacked whale began to roar.* The music of this place! It’s wonderful

(wait while Rachelle finishes III)

Never have I heard as complete a repudiation of the idea that human beings are the only wondrous beings, that we are in charge, that we are the point of the whole thing. Each being is worthy. Each fractal layer is necessary, all the lives the theme, all the lives the variations.
Just ask the little boys about the sunflower seastars. Gooey and heavy, sometimes a meter across, stubbled with spines like the grey chin of an ancient man, they creep after prey on legs with a hundred thousand tube feet. When they are stressed, their legs fall off and crawl away, shedding a chemical that warns of danger. How shimmering with menace the very seawater must be on a day this creature dies.

PLAY VARIATION IV

All the years, we humans have been lifted by the assurance that birds would go and birds would return, that storms would come in season and storms would blow back to sea again, that fish would scatter eggs before they died.

The music of the world was a repeating promise, a promise that harmony would be restored again and again in chords so complicated and beautiful that we could love them, even if we could not fully understand the genius of their pattern.

In Oregon, the first rufous hummingbirds returned in late February last year when the blueberries bloomed at the coast.

Violet-green swallows returned to their ponds to meet the mayflies. It was a great day in the swamps, when American bitterns and yellow-headed blackbirds swooped in, grumping and hollering.

The humans and the birds slept and woke by this, lived and died by this faith in inevitable, unfolding harmony, the expectation and the arrival, the call and the response, the question and the answer, the world’s promise of absolution and return.

*The weather comes now and goes, and who can make sense of it? *

PLAY SECOND HALF OF VARIATION IV, KDM speaks over

As it turned out, the swallows came back to Oregon before winter was finished, and there were no insects in the wind.
Have you seen a starved swallow, its wing frozen to the sand? Have you seen the frozen eye of a swallow? It’s white. You can’t see into it.
End variation IV

Five times in planetary history, Life has faced catastrophic extinction. Awful forces of exploding rocks, boiling seas, poisonous clouds – or icy glaciation and shrinking seas – or storms of comets -- ended forever the possibilities in the strange and wonderful bodies. Five massive extinctions, when evolutionary development started over with what was left. . . . 
And now, we are told, we live in the time of the Sixth Great Extinction, bringing the Cenozoic Era to a close. 
How astonishing to find ourselves in this time.

Extinction. Extinguish. Cause to cease burning. All those sparking lives.

A collision with an asteroid marked the end of the Cretaceous, 66 million years ago, when perhaps eighty percent of the species vanished, including most dinosaurs and many of the small creatures of the seas.

Is it possible?
Is it possible that we are living through an extinction event of equal power? 39 percent of terrestrial wildlife gone, 39 percent of marine wildlife gone, 76 percent of freshwater wildlife gone – in our lifetimes. The greatest extinctions are in the poor countries, with losses of 58 percent, where the wealthy countries are outsourcing their environmental destruction.

What is the cause? Deforestation, a dramatic loss of habitat; overharvesting of the oceans; poisoning of land and air; agricultural expansion; and climate change. And what causes that? A way of life, a constantly growing, all-consuming culture driven by extractive industries that have few moral or legal constraints.

For all their horror, the early extinctions were natural Earth processes, “acts of God.” This current great wave of dying is the direct result of human decisions, knowing and intentional, or wantonly reckless. That changes a calamity into a cosmic crime, a failure of our responsibilities toward the lives that are now in our hands. Extinctions one through five call us to awe; number six calls us to rage – rage against the dying.

PLAY VARIATIONS V, VI, AND VII, KDM start over the lingering chord
It’s madness, the trades we make. Unless something stops us, we will keep on converting living creatures into dead commodities.
We trade deep mossy forests for uselessly large homes.
We trade wide-winged albatrosses for plastic six-pack-rings.

We trade a singing marsh for another Costco parking lot.
It’s madness, this consumption, this eating up.
We trade rhinoceros horn for male sexual potency. We trade bear spleens for sexual potency. We trade Tibetan red deer for sexual potency. What is this overriding need?

For corn to burn in our cars, we are happy to give up monarch butterflies. For one more fitness center, we blithely give up the spring chorus of frogs. For petrochemical profits, we give up the god-damned future.

It’s a frenzied, mad auction of what is of ancient value for what is cheap and desperately sad.
A mad rush to the end of the world.

PLAY VII (let the tone fade, then KDM come in on fading tone)

But the most terrible trade is the transmogrification of plant and animals into human flesh.
Daniel Quinn: “Since 1970, -- that same 1970 -- the biomass of the human species has gained 50 million tons. It came from other members of the community of life. At the same time, the world is losing 150 species a day. We are turning 150 species a day into human fat and gristle.

PLAY VIII

(KDM start after two full phrases and 10 more beats into the music)

And no one should assume that the human species can come out ahead in this trade.
We are like people who live in the penthouse of a hundred-story building, Daniel Quinn writes. Every day, we send workers down to remove blocks from the foundation, so we can make our penthouse bigger, fancier. This might work for a hundred days. But for hundreds of years? At some point, we will have created so many channels of emptiness that the entire structure will collapse.

END VARIATION VIII, HOLD LAST NOTE Kathy, speaking over the last held note, ***

Then, with their arms spread, the children will fall from a great height, crying out like broken sparrows.

PLAY IX, AND X

*When we will ask, how much are we willing to lose?*

PLAY X AGAIN

(KDM, starting right away and speaking over)


END OF X, KDM go right on

Condors and kit foxes, chased from the cliffs by fracking pumps loud as diesel trucks. Black-footed ferrets, startled from their burrows by the rhythmic thud of
seismic oil explorations. The blue whale, the narwhal, hazed by underwater seismic oil explorations, air-guns exploding every ten seconds. The thud, the pain of impact on the ears, every ten seconds, the thud. (right away)

PLAY VARIATION XI

The Industrial Growth Economy has offered us a terrible bribe. (Lewis Mumford). These are the terms:
We can have everything we want. Bouquets of Ecuadorian roses, elegant meals of seared tuna and pineapple. Huge houses and room-sized cars, music on demand, movies on demand, everything we want on demand, guaranteed free two-day delivery of anything in the world, this glory,

– on the condition,
On the condition, that we never ask where it came from, or at what cost. As long as we never look back and see the ruined forests and souring oceans, the deaths that are required to produce these pleasures... as long as we never look forward, and foresee the ecosystem collapse, the dead zones, the danger.

That’s the deal: If you ask the cost, the glittering life becomes impossible. The extractive, all-consuming economy reveals itself as a giant going-out-of-business sale, planetary and moral bankruptcy, the economy of dying.

Any culture that prides itself on accumulating wealth instead of sharing it, a culture that gobbles up the fecundity of the planet instead of nurturing it, an economy that eats its own feet, any economy of infinite extraction, will kill off the sources of its sustenance.

How can this be rational? How can this be right?

PLAY VARIATION XII
The existential peril is serious; we won’t be able to live on a devastated planet. But the moral peril is worse; it’s wrong to wreck the world.

When a corporation, in order to bloat profits that are already the biggest in the history of money – when a corporation knowingly, intentionally destroys the beautiful networks of lives that sustain our own? That “business-as-usual” is moral monstrosity on a cosmic scale.

Let us see it for what it is, unblinkered by habit or profit, when an agribusiness sprays a cornfield with herbicide that kills everything but corn – killing outright the spurge and sunflowers, starving the beetles and the larks.

When a timber corporation cuts a forest of moss-hung trees, with its owls and voles, and sprays poisons from helicopters to kill everything that’s left.

When an international corporation builds an oil refinery on an eel-grass estuary where salmon-fry scatter above starry flounders.

When we invest in these, or ignore them, we become the foot soldiers in the war against the Earth.

PLAY VARIATION XIII. LONG SILENCE (END OF PART 2).

So we find ourselves at an intermezzo . . . when even the music extemporizes, wildly searching for a way forward. And so are we, at this hinge point in history, desperately searching for a way forward. Even if it breaks our hearts, even if it changes our lives forever, we have to confront that essential question, what do we love too much to lose?

PLAY INTERMEZZO AND VARIATION XIV AND THEN PLAY IT AGAIN A SECOND TIME

(Then Kathy reads over the second PLAYING of XIV):

In the spring when our granddaughter was born. I brought her to the pond so she could feel the comfort I had known there for so many years. Killdeer waddled in the mud by the shore, but not so many as before. Ahead of the coming
heat, butterflies fed in the mud between the cracks, unrolling their tongues to touch salty soil.

I held my granddaughter in my arms and sang to her then, an old lullaby that made her soften like wax in a flame, molding her little body to my bones. She fell asleep in my arms, unafraid.

I will tell you, I was so afraid.

Poets warned us, writing of the heart-breaking beauty that will remain when there is no heart to break for it. But what if it is worse than that? What if it's the heart-broken children who remain in a world without beauty? How will they find solace in a world without wild music? How will they thrive without green hills edged with oaks? How will they forgive us for letting frog-song slip away?

It isn't enough to love a child and wish her well. It isn't enough to open my heart to a bird-graced morning. Can I claim to love a morning, if I don't protect what creates its beauty? Can I claim to love a child, if I don't use all the power of my beating heart to preserve a world that nourishes children's joy? Loving is not a kind of la-de-da. Loving is a sacred trust. To love is to affirm the absolute worth of what you love and to pledge your life to its thriving -- to protect it fiercely and faithfully, for all time.

Ring the angelus for the salmon and the swallows. Ring the bells for frogs floating in bent reeds. Ring the bells for all of us who did not save the songs. Mother of god, ring the bells for every sacred emptiness. Let them echo in the silence at the end of the day. Forgiveness is too much to ask. I would pray for only this: that our granddaughter would hear again the little lick of music, that grace note toward the end of a meadowlark’s song.

Meadowlarks. There were meadowlarks. They sang like angels in the morning.

KEEP PLAYING VARIATION XIV TO THE END, THEN GO STRAIGHT INTO VARIATION XV

This is the endlessly creative world that we must save, the lyric voices that we must hear, the sanctity that we must protect.

Every extinction, every suffering, every destruction, is a profanity.
It is a violence we cannot even begin to measure because we have only the sorriest understanding of the world’s multitude of lives.

Be prepared for anger and for grief.
The world is a mystery of infinite and intrinsic value.
Be prepared to love it in ways beyond our own understanding.
This wondering love is what brings us to the work ahead of us and gives us courage in the struggle.

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So, what do we have to do? Three things, and we have to do them all.

PLAY XVI AND XVII

Number One, We will stop the madness.

It’s true that thousands of species are irretrievably gone.

It’s true that the greenhouse gas pollution already in the atmosphere is going to cause climate changes that will work themselves out over millennia.

It’s true that federal regulatory agencies that might have defended clean air and clean rivers and migratory birds have been captured and are now controlled by the very corporations they were meant to regulate.
So corporations are free to MAKE A PROFIT and damn the consequences – Particularly if those consequences are born by those who have no voices to defend themselves – small children, marginalized people, future generations of all species, plants and animals, those Pope Francis calls “the silent voices screaming up the heaven.”

It’s true that change, if change occurs, will be led from the conscience of the streets – not from some sudden moral awakening in the federal government. As it so often has, change will come from civic and moral institutions – states, cities, businesses, colleges, churches, foundations, and NGOs. That is you and that is me.
We can stand against corporate wreck and plunder. Stand. In the way. With a choir and a conscience and a sign.
We can stand and say, this is wrong, and I will not be a part of it. That’s good.
We also can stand and say, this is wrong, and I will not allow it.

So this is the question each of us asks, individually or (far better) collectively: what destruction can I stop?
What oil terminal, what parking lot, what coal train, what poison-spraying truck, what clear-cut, what pipeline, what palm oil plantation?

Around the world, people are drawing the line, saying,

Not another mountaintop. Not another rainforest. Not another estuary. Not another prairie. Not another mighty river can be traded away for cash. These are not industry’s to take or sell. They belong to the future of the everlasting Earth.

PLAY VARIATION XVIII

Now, step two.

We protect, restore, grow, preserve, we hold on to what we’ve still got.
No-ah knew that whatever survived the Great Flood would repopulate the world, the lions and the elephants two by two.

Now, millennia later, the world is going through a biological bottleneck as brutal as God’s fury in No-ah’s time.
Whatever species make it through – that’s what the world will be made of.
No-ah protested – I’m old, I’m tired, why me o lord?
The answer is, it’s got to be everybody, each asking, what ark can I build, what habitat can I save or create, that will carry living things?

“We need flotillas of Arks, uncountable. Tiny handmade ones, and massive ones; science-arks like battleships, and garden-arks like rowboats, all set into the forward-river of time, to sail if possible through the narrow part of the hourglass of our era. . . .
And then what? To touch, chancewise, on dry land. And start the world anew.”
(David Oates)
We have to do everything we can to stop the flood of destruction, to keep it from washing over the mountaintops. That’s the first thing and the most important. And then we work feverishly to save what we can, fishing it out of the sloshing waves and bringing it to safety.

PLAY VARIATIONS XVIII, XIX AND XX, PAUSE, then D D D
(K speaks over the Ds)

The third and necessary thing? Start over, at this Great Turning point in history, imagining new ways or protecting ancient ways to live on the planet without wrecking it. There has GOT to be a better way.

Charles Dickens said, It was the best of times it was the worst of times. It was the age of wisdom it was the age of foolishness. Isn’t this true of the world today?
And we can say more.

It is a time of heedless destruction, it is a time of extraordinary beauty. It is a time of bullies, and so it is a time of speaking out. It is a time of lies, and so a time of truth,. It is a time of uncertainty, and so a time of moral resolve. It is a time of sullen stupidity, and so it is a time to let our imaginations soar, not to envision the end of civilization, but to set a compass-course for its redemption.

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START PLAYING BOTTOM HAND OF CODA, probably twice

(Kathy speaks over coda)
Our work is not to save our way of life. Our work is to save the world from this way-of-life’s destructive power.

A dead planet is not our destiny.

And so our work is to invent life-ways of respect and restraint that work with, rather than against, the living, thriving Earth.
Music is a precarious relationship of sounds, moving through time – ephemeral, beautiful, forever changing.
That’s what a healthy ecosystem is, that’s what a life is.

We yearn to be called back into the world.
Everything yearns to be called back into a right relationship, the frogs into their chorus, the cicadas into their pulsing choir, the people into Earth’s harmonies, the dancing insects into their light. . . .
The cosmic challenge of our time is to re-create our humanity through this great crisis—
and this means not just saving our species,
but realizing our full humanity as it evolves in kinship with all the world’s blooming, bellowing lives--so that we can learn what it means to live in concert with the Earth.

RM: Begins to play coda

KDM: On the reeling planet that we hold in our hands,
May gentle rain fall forever on green hills.
May ice come in its time to glaze the bays.
May salmon faithfully return when sandpipers call.
And batwings whisper forever in dripping caves.
And may the children hum themselves to sleep in the safe and sustaining night.

RM: Finishes coda

End.