Good evening, everyone, thank you for being here, and thank you to Nellie and OAT for giving me the honor of speaking with you tonight.

Right now, agriculture is more present in our cultural discourse than it has been since the great war. It has never been more clear that farming and farmers are the first and last responders in a swirling array of geopolitical and climatic crises. And while the adjectives volatility and uncertainty dominate our discourse, the state and this country rely on the commitment, innovation, and sacrifice of farmers to feed and clothe the population. There has never been more land under cultivation, and yet farmers themselves have never felt less secure. We feel and experience the anguish of our land and our livelihoods at the same time, because of a false choice, a false dichotomy.

Not so long ago, this land was a cultural ecosystem built over eons by countless lives and deaths of creatures great and small. The human hands which held it for so long were wise with patience and time. Their hands kept fire and used it judiciously, feeding the system that fed them so richly on the wealth and abundance of woodland islands in a sea of savannah grasslands. The valley of long grasses grew vigorously, encouraged by fire, dotted with great sentinel oaks

whose branches brushed twisted fingers over the waves of tufted hairgrass, sloughgrass, bluegrass and meadow barley. The people were strong and cunning, and sang their stories so that their children would carry this wisdom in their very blood and bone, that their future was as rich as the soil, as clear as the river, and as eternal as the oceans, and entwined with those very elements under their care.

Our history here benefitted greatly from the generosity of that work, our century farms host some of those very oaks, their presence a witness to the passage of generations of land stewards and changes great and small. I am a child of this land, and everything I know of it was born from a deep love of it. I grew up on a farm and wanted to live in the forest, so I left chasing a career in forest ecology, and that led me back to farming, in this age of nature versus culture, of agricultural productivity and profitability versus conservation. This is the false choice. This is the deceptive narrative. Agriculture is the gift of the natural world, cannot exist without it, and to persist will require that we attend to the source of our great abundance and safety.

The Oak Accord was the spark that caught fire when two would-be best friends let go their professional abstractions and imagined a covenant that would bring

landowners together to hope with their hands. It is called the Oak Accord for a reason, for there is no greater symbol than the great oak that invokes our tether to the natural world, to our past, present and future, to every other point on the web that has supported our families and our farms.

Acorns germinate soon after they fall and before the first frost, they send a taproot deep into even the most shallow, poor soil, and that is all they do before the winter comes. In their first year, oaks will produce only one set of true leaves, remaining a few mere inches above ground, though below ground they are anything but small. All the energy from those first few leaves is poured into building a foundation, ten times the biomass below ground, a silent statement of their commitment to time and place. At any given age, the body below will be three times the width of the canopy, anchoring fragile hillsides, expanding the capacity of the watershed exponentially, filling the heavens with upwards of 700,000 solar panels alchemizing starshine to feed legions. And while she may pass 4 decades before a single acorn falls from her branches, over the course of her very long life she will birth several million acorns.

The oak is as ancient as her relationships. The flashy jays so common here share a common ancestor from Asia, where oaks evolved, and their very body plan is built around their relationship to the oak. Their beaks are designed to rip open a tough husk, and they have an expanded esophagus to accommodate many acorns, a big, nutritious seed capable of sustaining a large bird capable of covering great distances. They don't cache their food, instead burying single acorns throughout their territory – up to 4500 in a single autumn. The limitations of their memories result in a net additional 3000 potential oak seedlings per bird, per year across their 7-17 year lifespan.

Acorns are the wildlife MRE, providing enough protein, fat, carbohydrates, vitamins and minerals to sustain generations of woodpeckers, squirrels, deer, bears, mice, voles, turkeys, quail, ducks, and so many, many more. The acorn is itself an edible home for tiny weevils, you may have seen their little exit holes if you collect acorns. These weevils belong to the largest family of animals and while you may never actually see one, their larvae are one of the most abundant sources of protein for animals up the food chain in our neighborhood. Their excavated acorns make perfect homes for temnothorax ants, which are one of many sources of insect food that drive the terrestrial food chain. Plants make

insects, and oaks make considerably more insects than we appreciate. Most of our songbirds are insectivores, and to survive the winter they depend on abundant insect populations. To be clear, not all plants support the same insect productivity. Oaks host two to five hundred species of lepidoptera, the moths and butterflies alone, including The California sister, Propertius duskywing, mournful duskywing, golden hairstreak, and gold-hunter's hairstreak butterflies are known to use Oregon white oak as a larval host plant. These butterflies use the oak to complete their early and most vulnerable stages of their life cycle, while adults may use the oak for shelter and perching while looking for mates.

You've no doubt observed the marcescent leaves of the oak, holding on considerably longer than virtually all other deciduous trees. While not fully understood, this adaptation, along with the waxy cuticle that helps impart drought persistence, make oak leaves an invaluable currency for our food web. In any given temperate ecosystem, 75% of insect food for birds and animals is produced by only a few plant genera. Here, unquestionably, oak reigns again. While in agriculture we tend to focus a lot on generalists, some of our greatest insect allies are specialists, relying on but a few plant hosts to complete their life cycle. Lift a single layer off the oak leaf litter and you will barely scratch the

surface of the collembola, bristletails, carabid beetles, rove beetles, nematodes, worms, sow bugs, pill bugs, mites, and more. These detritovores perform the task of breaking down leaves, and are the base layer world-wide animal food pyramid, their bodies feeding everyone from spider to snake to nuthatch.

In living and dying these oak dependent animals are also pivotal to the turning of our nutrient cycle. Critical micronutrients are locked in deep soil columns, in trace amounts. The deep, deep roots of the oak access these minerals and when the leaves fall those minerals replenish our topsoil for growing nutrient dense crops. The blankets of leaves that cover the ground break down at three times the rate of alder, maple, or ash. Their waxy cuticle provides a brilliant structure to the ground cover, preventing erosion and evaporation, cooling the soil and holding water in times of drought.

This leaf litter may be the greatest unseen wealth of our working lands, for it feeds the armies of untold soil dwelling insects and microorganisms that feed our cash crops and keep our soils productive. The secondary plant compounds, the tannins and phenolics are that are in each of the 700,000 leaves a mature oak drops every year are at once defensive against invading pests and medicine for a healthy food

web. All organic matter is not created equal, you see. We need fast and slow food for the whole web to thrive and grow throughout the year, and oak litter can feed soil for up to three years, building deep banks of residue for fueling crops and nursing future oak seedlings.

The word persist comes from the Latin *sistere*, to stand, and per, meaning through, steadfastly. It is a standing verb, not a moving one. To persist is oak as verb. The oak is a standing universe of connections, and is a touchstone of this land, its history and people. In founding the accord, we saw the oak as a catalyst for dissolving the perceived mutual exclusivity between agricultural productivity and the healthy habitat on which it depends.

What I have tried to convey with my illustrated fraction of our food web is that the oak is both a keystone to and a metaphor for agriculture. The lives and livelihoods of this state and country depend on the quality and abundance of our agriculture, but our farmers are becoming few and aged, and have been largely ignored since the call of the great war. The genus Quercus, the oaks, support more life forms and interactions than any other tree genus in North America, and yet we have taken no care to ensure that they are not lost to us, taking with them the last

vestiges of our ecological stability and resilience. Our farmers and our oaks become ghosts before our minds can conceive what we've lost.

Don't worry, we won't stay gloomy here, this is a message of hope. But if we want to make change, we must always start with our own selves, our own hearts. Affection is the greatest predictor of what remains and what is lost, and I like to think we can and we should all fall in love with our homeland a million times a day. But we must see it first.

As a child I filled pint after pint of strawberries to earn money. In high school I worked in the vineyard and drove swathers and combines with my schoolmates on summer nights. In college I fought forest fires, and worked the graveyard shift in a sawmill to earn money for grad school to study forest ecology.

This is a state of wonders untold, the lungs and veins of our home have nourished and nurtured generations of our farm, forest and ranch families. To keep the vitality, the virility of our working lands, habitat networks and ecological infrastructure must become central to our succession planning. Succession is an ecological process of healing, and of achieving balance and elasticity over time.

Farm succession should be no different, pulling together a cultural ecosystem that connects farms to communities, and communities to their strongest allies and guardian families.

What the Oak Accord seeks to accomplish has great synergy with the work of the Oregon Agricultural Trust. At this moment, we need to harness all available resources to protect our only true economy which is our working lands and habitat networks. These can and must be in balance and harmony to ensure an enduring future of health, beauty and permanence. Right now, farmers and ranchers need to be seen by the people they serve and supported in replenishing the great wealth of rich, healthy soils, clean and plentiful watersheds, and the foods and fibers that tell the stories of our ancestors and the landscapes that conveyed us through time.

I make wine now, and I farm grapes, sheep, chickens, and grow all the food and trees that I can. Growing and tending to the living world is how we live as part of, not apart from, our land. What we grow is what we will save, and we must be very intentional now with how we carry that responsibility. If wine has taught me anything, it is that everything true and beautiful in the natural world can be

experienced as smell and taste and touch in the things we harvest from the land. The more we tend to the completeness of the ecosystem we inhabit, the more we have to work with to create regional identity in our working lands and agricultural systems, adding to the value of our harvests. I submit that this will only be more important in the coming decades.

The dependence of healthy agriculture on healthy habitat is well documented. The support that farmers need to fortify their lands with habitat infrastructure, hedgerows, shelterbelts, wildlife corridors, and concerted efforts to replenish healthy soils is not going to come from the seemingly unlimited wilderness that came before. This will be a human investment, and likely the most important one of our time.

One of the most over-used quotations in agriculture, for agriculture, by agriculture, in defense of, etc. ‘You cannot go green if you’re in the red,’ or often put this way, ‘there can be no environmental sustainability without economic sustainability.’ While this statement captures the tenuous situation that many of our land stewards are in, it is a false choice. For the basis of black-line agricultural economics was based on a linear model that either burned or exported the

infrastructure of abundance, and there can be no truly profitable agriculture when Nature is in the red.

Current estimates put oak habitat at 2-7% of it's historic norm. As a winegrower I acknowledge that we occupy critical hot spots of this system, and we also represent threat #1. I've said it before but it bears repeating that the measure of sustainability does NOT BEGIN after the last tree has been felled; it is not merely the measure of our post-development inputs or the size of our solar installation. This land is not for making blank canvases on which to paint our own faces. The removal of the last vestiges of this most precious and unique habitat in the name of more agricultural productivity will not arrest climate change or accommodate generations of future farmers.

Brilliance in anything we create from this land comes from the humble recognition of the magnificence of this landscape. It is to compare a wine that tells the story of the gentle drama of this place, a luminous lightness held up by stately and sentinel power to a wine that is *just a bunch of words on the back label*. We are beholden to the system we will either save or end.

OAT's mission is to work with farmers, ranchers, organizations like the Oak Accord, conservation leaders and communities to collectively vision the healthiest and most generous future for Oregon. Without judgement or angle, OAT seeks to feed what feeds us. This is the original covenant of a cultural ecosystem. We need that commitment now more than ever, with pressures coming from development, climate, and waves of geopolitical instability. I stand before you and with you to support this critical work, and I thank you very much.