<u>The Climate Resilient Farmer</u> How Landrace Biodiversity can feed a Planet facing unprecedented Climate Change

(or Why is modern wheat is making us sick?)

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1' short modern wheat

What we believe about our past shapes our beliefs of who we are as human beings and as farmers, our understanding of how foodcrops evolved and our potential to co-evolve with plants for a vital future. Just as the landrace seeds are almost lost, the practices that evolved the unique qualities of landraces are almost forgotten.

Let us rediscover the seeds of biodiversity that have been generously gifted to us by generations of peasant farmers, and relearn age-old traditions of polyculture that create flexible, complex and resilient farms and gardens that can better adapt to unprecedented weather extremes.

Like a canary in the coal mine, modern wheat, the most widely grown crop on the planet, is an indicator organism of the industrial culture that developed it. Modern wheat is bred with dependence on petroleum-based agrochemicals to survive. Their roots are short and stunted for easy nutrient uptake of synthetic agro-vitamins. They are dwarfed to less than 2 feet so that the plant will not collapse under heavy nitrogen applications, and for easy of harvest by goliath combines (yet are now too short to scythe by hand). Modern wheats makes us sick with indigestible gluten laden with toxic nitrates from chemical fertilizers. Bred for total uniformity, enslaved, they are unable to adapt to new climate conditions. The seeds are patented to prevent farmers from saving them.

In contrast, ancient wheat landraces evolved in organic fields in the hands of traditional farmers. They developed from wild wheat over millennia to be uniquely well-adapted to their local micro-climates in valleys or mountains, parched deserts or rainy coastal fields. Generation by generation, seed-savers, most often women seed-savers, selected the most resilient plant survivors of adversity for robust health and rich flavor. Landrace crops have deep root systems that reach down to the lower soil levels for micronutrients and soil moisture during drought. Extensive root systems hold the plant steady during torrential rains. Tall, majestic and flexible, landrace wheats are powered by sunlight (not fossil fuels), and are rich in healthy plant-based phyto-nutrients and trace minerals that are easy for humans to digest. They are planted in complementary and complex polycultures with legumes and vegetables. Landraces thrive under weather extremes where modern wheat fail.

Landrace wheat inspired awe and reverence in peasants, who believe that the grain field is animated by a soul like that of humankind. The life processes of reproduction, growth, decay, and death are the same principles that are alive in human beings. They believe that in the plant, as in the human, there is a vital element, the soul of a plant that is like the vital soul of the human. This belief in the plant-soul is at the heart of age-old cereals traditions. The spirit of the grain was known as the Great Mother.

The Bread Hearth was central in ancient Temples throughout Old Europe, a sacred space of the Great Mother. This can be seen from the many 'womb' ovens found in the shape of a pregnant woman engraved with energetic spiral lines. Dough prepared in the Temples was sacred bread used in life-affirming worship. Breads marked with 'spirals of life' were probably the first offerings to the Earth Fertility Goddess¹, that combined with folk planting and harvest traditions in celebration/evokation of the bounty of the earth.



¹ Goddesses and Gods of Old Europe 6500 - 3500 BC. Marija Gimbutas. Thames & Hudson 1982

<u>Lunasagh - Ancient Celtic Harvest Festival²</u>



'Let the people use this day to make offerings to the Mother Goddess river of their region and to bathe themselves and their farm animals in "living wild water" - a stream or a river, a lake, a pond, or the sea³. In every case shall offerings and prayers of thanksgiving be made.

Then shall the people make offerings to standing stones, dressing them with wreaths of new grain and flowers, placing first fruits at their feet. Let them cut a sheaf of new grain and set it afire in the ancient manner, burning off the husks with fire. Then let them grind the grain in a quern or a mill and bake a bannock from it saying:

On the feast say of Lugh and of Danu, I cut a handful of the new grain, I purified it by fire⁴, And rubbed it sharply from the husk with my own hand. I ground it in a quern, I baked it on a fan of sheepskin, I toasted it to a fire of rowan, I shared it round my people. I went sunwise round⁵ my dwelling In the names of Lugh and Danu Who have preserved me, Who are preserving me, and who will preserve me, In peace, in flocks In strength of heart, in labor, in love, in wisdom and mercy, until the day of my death.'

Let us rededicate our fields and tables to the life-affirming vitality and generosity evoked by landrace wheat!



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² The Festival of Lughnasa, Mairne MacNeil, University College, Dublin 2008

³ aka 'mikvah' of living waters

⁴ In the ancient Israeli Temple the grain was sanctified through fire to remove the husks

⁵ Done on the harvest celebration of Sukkot rounding the bima 7 times with sacred plants