The Black Star

Farm, Field, & Forest

Special Edition

May 2025 A.S. LX

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Welcome to the Farm, Field, & Forest Special Edition of *The Black Star* !

Greetings ALL!

I am Jessimond of Emerickeskepe, Ansteorra Farm, Field, and Forest (FFF) Deputy MoAS. As our FFF Community turns one year old this month, I am excited and honoured to present this Special Edition of ***The Black Star*** for your reading and viewing pleasure.

I wish to express my most sincere gratitude to our Kingdom MoAS, Magnifica Biatrichi Malatesta Canzionari di Palermo, for entrusting me with being Ansteorra's Premiere FFF Deputy MoAS and supporting my vision for beginning our community. I must also thank Sayyida Rayya al-Ruqay'a, for giving me the opportunity to be the Editor of this Special Edition of ***The Black Star***, but I am especially thankful to our (NEW) Kingdom Chronicler, Lord Estienne De Bretagne, for his patience and diligence in helping to make this Special Edition a reality! Without his efforts, this edition simply would not exist. I am delighted to thank each of the amazing submitters, both the writers and the artists, without whom this Special Edition would simply not exist. Last, but certainly not least, I need to thank my amazing husband, Lord Tobias of Emerickeskepe, for not only being my Co-Editor (Proofreader Extraordinaire), but for all the coffee and delicious meals provided during its creation.

Our FFF Community encompasses a wide variety of Agriculture, Animal Husbandry, and Forester interests. At this time, Ansteorra does not have a ***Chartered Forester Guild***, but there IS interest, with discussions happening on our Ansteorra Foresters Guild (unofficial) Facebook (FB) Group. More information is available in the ***Announcements and Accolades*** section (page 5). For the Agriculture, Animal Husbandry enthusiasts among our community members, we have the Ansteorra Agricultural Arts & Sciences (unofficial) FB Group which also includes gardening, foraging, and land management projects. Speaking of Agriculture and Animal Husbandry, my FFF ER Deputy, Æsa Mikjálsdóttir, is an invaluable member of our FFF community, as well as the founder and administrator of the Namron Agriculture and Animal Husbandry (unofficial) FB group.

Of special note, our FFF Community is open to ALL and is not restricted to those residing in our Stellar Kingdom! Please consider joining us and spread the word far and wide to family and friends who share our many niche interests!

I look forward to having many opportunities to learn from ***and with*** each of you.

~ Jessimond of Emerickeskepe

Farm, Field, & Forest (FFF) Deputy MoAS

Farmff@moas.ansteorra.org

Image description: Co-Event Steward, Jessimond of Emerickeskepe, rings a bell to announce the beginning of the Rosenfeld's Yule Feast (December 2019).

Photo by: Tobias of Emerickeskepe

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Meetings & Gatherings

Of our Farm, Field, and Forest Community

Are you interested in researching and/or DOING activities commonly associated with period agriculture, animal husbandry, and/or Foresters?? If so, then we have a community for YOU! Our Farm, Field, and Forest (FFF) community covers an extremely wide assortment of interests including but not limited to:

*** Gardening**

*** Breeding and Raising livestock**

*** Land and Forest Management Practices**

*** "Bushcraft" - Primitive Camping, Hunting, Fishing, etc.**

*** "Wildcrafting" - Foraging and Nature Crafts**

ALL FFF activities and meetings are open to everyone who wishes to participate.

Changes in meeting/gathering dates/locations will be posted to the Ansteorra Farm, Field, & Forest (FFF) Facebook Group

FFF Activities are currently scheduled at the following EVENTS:

Steppes Warlord - Barony of the Steppes;
Canton, TX ~ Memorial Day Weekend
Website, Facebook

War of the Rams - Barony of Bordermarch
Colmesneil, TX ~ November 20-23rd

For those who do not use FB, or anyone wishing additional information, please contact *Jessimond of Emerickeskepe*;
Farm, Field, & Forest (FFF) Deputy MoAS:
Farmff@moas.ansteorra.org

To learn more about the Ansteorra Farm, Field, and Forest community, please visit the *Ansteorra History Wiki*

Ministry of Arts & Sciences

Kingdom Minister of Arts and Sciences (MoAS)

Magnifica Biatrichi Malatesta Canzionari di Palermo

kingdom@moas.ansteorra.org

Finding Special Interest Communities in Ansteorra

Officers, Special Interest & Cultural Groups

Directory of Special Interest Communities

Artisans of Ansteorra (Facebook Group)

nnouncements and ccolades

Those who read the delightful December 2024 Special Research Edition of ***The Black Star*** may recall that our Farm, Field, and Forest community member, Aoife inghean Mhichíl, has been engaged for several years in the study of period dyes. Well, we are extremely happy to announce that their research paper, ***Searching for Dubh: Experiments in Black Dyes Pre 15th Century Ireland and Scotland***, was published in the January 2025 EXARC Journal!

Since completing their research paper, Aoife has been searching for the raw dye stuffs necessary to continue their research and experimental archaeology - specifically a couple pounds of crushed branches, bark, and leaves of Populus nigra (black poplar, Lombardy Poplar) *OR* Populus deltoides (Eastern Cottonwood, Necklace Poplar). Unfortunately, Populus nigra is NOT native to the Western Hemisphere, but may occasionally be found in ornamental plantings. However, Populus deltoides IS a native tree that is found in several counties across Ansteorra!

Shortly before the Shire of Graywood's Ansteorra Goes to Mission Tejas Folk Festival (demo), an accessible Populus deltoides was located in Cherokee County, TX. With express permission granted to carefully harvest a few of the lower branches, the necessary dye stuffs were collected and handed off to Bannthegn Willoc macMuiredaig during the demo.

STAY TUNED to discover the exciting results of this amazing experiment!

Ansteorra now has a *Guild Deputy Minister of Arts and Sciences* (MoAS)!

Magister Goldweard of St. Golias was recently announced as being Ansteorra's Premiere "Guild Deputy MoAS!" Within this role they will be empowering both new and established guilds by providing resources to help showcase our many unique Arts and Science interests. They are already planning to create a resource provision for Guilds as well as assisting with reporting for our Kingdom's MoAS.

This is an extremely interesting development for our Farm, Field, and Forest community as many of us are heavily involved in existing or potentially new Guilds, both Kingdom wide and within our Local Branches!

Magister Goldweard will be reaching out to current Guild leaders soon. In the meantime, they asks that anyone who has any questions to contact them at:

guilds@moas.ansteorra.org

Æthelmearc Forestry Guild Challenge

Early in September 2024 the ***Æthelmearc Royal Guild of Foresters*** issued a ***2024 - 2025 Forestry Guild Challenge*** !

With this announcement came a call stating that Out - of - Kingdom participants were WELCOME and encouraged to join the fun! The list of potential tasks has quite a broad scope, and could certainly be a fun way to try new things, share what you are already doing, or simply connect with fellow foresters from both near and far!

Below is the text from their original post (*see above* for the hyperlink to *The Long Trail* post* which contains the official rules along with the complete list of possible tasks):

> *The Æthelmearc Royal Guild of Foresters is a place for those interested in exploring the outdoors as their SCA persona might have done so in the past. Kingdom Foresters learn and demonstrate historic camping, primitive fire starting, bushcraft, hiking, foraging, fishing, hunting, outdoor cooking, or any number of other related pursuits (or kit building to better do those activities in a period style).*
>
> *To promote these activities the Guild is sponsoring a Challenge from September 5, 2024, to July 25, 2025 (start of Pennsic 52). This is based on the Challenge that the Atlantian Foresters Guild ran during the pandemic and we thank them and Forester Isobel of Carnewyth very much for the inspiration for this activity!*
>
> *As always, when pursuing SCA Forestry activities, please follow mundane laws, CDC and local safety guidelines, as well as good old common sense at all times.*

Rules:

* Points may only be earned once for each activity while some items in different categories may be combined, those in the same may not. (E.g. a single backpacking trip does not simultaneously earn points for the basic camping trip option but a second backpacking trip would qualify for it. You can, however, stack items such as building a fire or cooking a meal on a camping trip).

* Completion of any 5 activities earns a special participation badge that can be linked to other tokens or badges.

* Completion of 15 points across a minimum of 3 categories earns a “Challenger” badge or token.

* Completion of 25 points across a minimum of 5 categories earns a “Campaigner” badge or token.

* Completion of 50 points across 6 categories earns a “Prevailer” badge or token and our mad respect. (Name might change here!)

Feel free to tailor the difficulty based on age or experience level, this is for fun and education and to encourage forester activity during quarantine and beyond. This is not a competition! Folks are encouraged to plan activities together, such as hikes, camping trips, classes and the like. If your submissions are to be shared on the Guild blog*, please express that we have permission to post it in your submission email.

The Challenges are open to anyone, whether in Æthelmearc or not, whether currently in the Guild or not. However, the items that also qualify for Guild ranking will only earn ranking for those on the Æthelmearc roster and who have taken the Oath to earn them the Novice level. (Do not worry, this will run long enough that you can apply now, get through the waiting period and begin!)

* *The Long Trail* is the Æthelmearc Royal Foresters Guild blog and serves as the official newsletter at this time.

Forester Guilds of the Known World

Preliminary discussions for the *possible* creation of a *Chartered Foresters Guild* in Ansteorra are afoot!

NOTE: It is recommended that you please reach out to our Farm, Field, and Forest Deputy MoAS to determine the current status of the Ansteorra Foresters Guild.

You may also become an ***affiliate member*** of ANY currently Chartered Guilds in another Kingdom (such as our neighbors to the east, in Gleann Abhann) while actively working towards helping Ansteorra form our guild!

For your convenience, here are the names, websites, and social media links for SCA Forester Guilds around the Known World. CHECK THEM OUT!

East Kingdom Royal Foresters:

Website and Facebook Group

Kingdom of Atlantia Royal Forestry Guild:

Website, Wiki, Facebook Group, and YouTube Channel

Royal Foresters of Meridies:

Facebook Group

Unofficial Northshield Foresters Guild:

Facebook Group

Northwest Foresters Guild (An Tir):

Facebook Group

Æthelmearc Royal Guild of Foresters:

Website and Facebook Group

Caidan Forestry Guild:

Facebook Group

Gleann Abhann Foresters Guild:

Facebook Group

Foresters in Trimaris:

Facebook Group

COVER ART: Emma Farewyll

"Approaching Game with a Cart"

Gaston Phoebus's *Livre de la chasse*
"The Book of Hunting"

(1407) Illuminated Manuscript.
Morgan Library and Museum. MS M.1044

Ansteorra Goes to Mission Tejas' Annual Folk Festival

A Brief Demo Report by Jessimond of Emerickeskepe

Since 2023 the Shire of Graywood has been setting up our demo space at Mission Tejas State Park as part of their *Annual Folk Festival*, which is held on the 4th Saturday in April (April 26, 2025).

As the Shire's Demo Coordinator, I worked with the Park Staff to arrange for our volunteers and presenters to CAMP ON SITE (Friday through Sunday) in the fashion of the Pioneer Life presenters! Our demo this year included the following activities:

- Rapier Demonstrations throughout the day
- Camp Cooking
- Herbalism and Apothecary Guild Displays
- Farm, Field, and Forest Displays
- Period Games
- Textile Displays

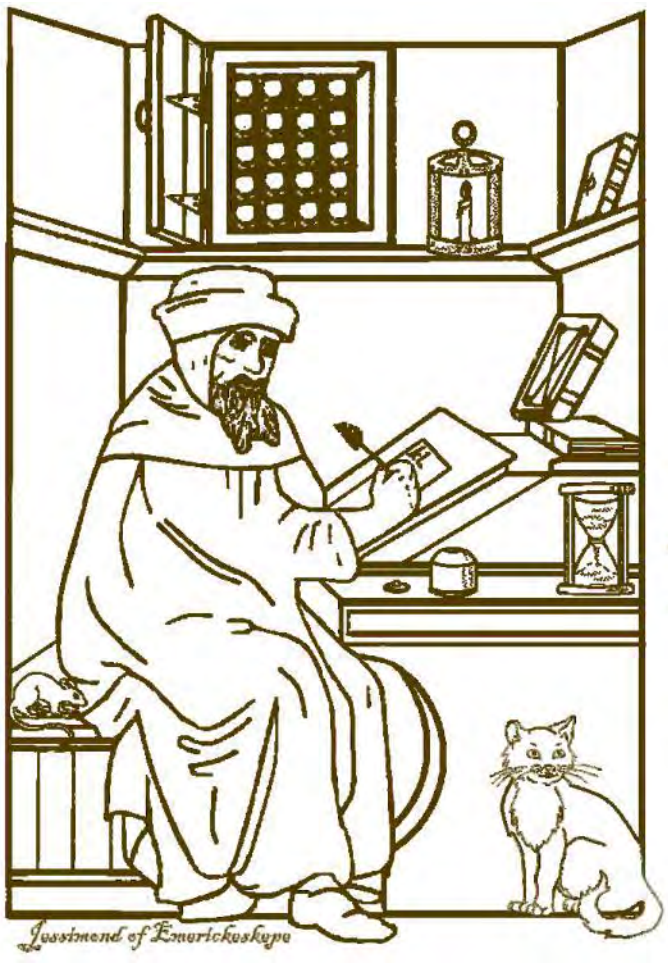
Website: https://ansteorra.org/graywood/demonstrations-demos/

Camp Kitchen (Top Left)

Gourd crafts with foraged dyestuff and FREE seeds for park guests, our SCA volunteers, and other presenters (Top Right)

Cooking with fire and ash (Right)

Photos by: Tobias of Emerickeskepe



HISTORICAL HAPPENINGS

BY TOBIAS OF EMERICKESKEPE

Zodiac signs: Taurus & Gemini

Medieval Feast, Festival, and Holy Days in May:

May Day/Beltane Feast of Ascension Feast of Pentecost

May was originally the third month of the year in the Roman calendar and has 31 days. It became the fifth month when January and February were added and was therefore the fifth month of the year in both the Gregorian and the Julian calendars. Interestingly it does not start or end on the same day of the week as any other month. It is named after the Greek goddess, *Maia* who is also identified with the Roman goddess of fertility, *Bona Dea*. This is the month when plants really start to grow.

In Saxon May is called *Thrimilci* meaning the "month of three milkings" referring to a time when the cows could be milked thrice a day. May Day (May 1st) is probably best known now for the Medieval tradition of “dancing the Maypole dance,”. Fair young maidens circle the decorated pole weaving ribbons together in the process. This custom continues to be practiced in many countries.

Significant Happenings:

The *Capitulare de villis* is a text composed sometime in the late 8th or early 9th century that guided the governance of the royal estates, possibly during the later years of the reign of Charlemagne (c. 768–814). It lists, in no particular order, a series of rules and regulations on how to manage the lands, animals, justice, and overall administration of the king's property and assets. The document was meant to lay out the instructions and criteria for managing Charlemagne's estates and was thus an important part of his reform of Carolingian government and administration.

https://en.wikipedia.org/wiki/Capitulare_de_villis

The Plan of St. Gall created in the early ninth century is the oldest surviving visualization of a building complex produced in the Middle Ages, containing ground plans for some forty buildings, ranging from a church, monastic school, abbot's residence, and infirmary, to water mill, stables, and poultry houses.

https://cmrs.ucla.edu/archives/projects/st-gall/

https://xtf.lib.virginia.edu/xtf/view?docId=2007_04/uvaBook/tei/

King William II Rufus of England (1056-1100) was shot in the back with an arrow and killed while hunting in the New Forest in Hampshire. The incident was probably an assassination. https://www.britannica.com/biography/William-II-king-of-England

In the late 11th century on the orders of William the Conqueror, a survey was carried out in which commissioners compiled accounts of the estates of the king and of his tenants in chief. From these documents the king's clerks published a summary, which is known as the Domesday Book. https://www.britannica.com/topic/Domesday-Book

King Henry I (1069-1135) Reportedly ate too many lampreys while on a hunting trip. This was directly against his physician's advice! His condition worsened over the course of a week and resulted in his death. https://www.royal.uk/henry-i

Byzantine Emperor John II Comnenus (1087-1143) died following a hunting accident (allegedly by a poisoned arrow that he accidentally cut his hand on).

https://www.britannica.com/biography/John-II-Comnenus

Hildegard of Bingen (1098-1179) wrote a treatise titled "Materia Medica" which cataloged the properties of plants, trees, birds, fish, and stones. She also wrote treatises titled *Physica* and *Causae et Curae*.

* *Physica* was a 12th Century treatise that describes the healing properties of plants and emphasizes balancing the humors. It is considered the first German herbal treatise.

* *Causae et Curae* discusses the physical processes of the human body and its relationship to the natural world. https://www.britannica.com/biography/Saint-Hildegard

Charter of the Forest in 1217, all of the rules that were contained in the 1215 version of Magna Carta and related to the forest were put into a separate charter – "The Charter of the Forest". In 1225, some minor adjustments were made, and the charter was issued in its definitive form.

https://www.nationalarchives.gov.uk/education/resources/magna-carta/charter-forest-1225-westminster/

Peasants' Revolt, (1381), first great popular rebellion in English history. Its immediate cause was the imposition of the unpopular poll tax of 1380, which brought to a head the economic discontent that had been growing since the middle of the century. The rebellion drew support from several sources and included well-to-do artisans and villeins as well as the destitute. Probably the main grievance of the agricultural labourers and urban working classes was the *Statute of Labourers* (1351), which attempted to fix maximum wages during the labour shortage following the Black Death.

https://www.britannica.com/event/Peasants-Revolt

Geoffrey Chaucer's service as clerk of the king's works lasted only from July 1389 to June 1391. During that tenure he was robbed several times and once beaten, sufficient reason for seeking a change of jobs. In June 1391 he was appointed Subforester of the king's park in North Petherton, Somerset, an office that he held until his death in 1400.

https://www.britannica.com/biography/Geoffrey-Chaucer/Last-years-and-The-Canterbury-Tales

Peasants' War, (1524–25) peasant uprising in Germany. Inspired by changes brought by the Reformation, peasants in western and southern Germany invoked divine law to demand agrarian rights and freedom from oppression by nobles and landlords.

https://www.britannica.com/place/Holy-Roman-Empire

The Monk Walafrid Strabo (809-849) wrote ***Hortulus*** (My Little Garden), a long Latin poem (440 lines), about his love of gardening and all the plants that he grew at Reichenau Abbey. This discussion of the gourd plant (Latin Cucurbita) is an extract, representing lines 99-151 of the poem. https://sites.uwm.edu/carlin/walafrid-stabo-hortulus-the-gourd/

The Gourd

The gourd too aspires to grow high from a humble beginning.
Like shields are the leaves that cast those great shadows; like cables
The stems it puts out so thickly. You have seen how ivy twines
Its leaves round a lofty elm, from the earth's bosom
Lapping its supple arms around the whole tree till it finds
A way to the very top, and hides all the wrinkled bark
With a mantle of green — You have seen how a vine, trained to a tree,
Scrambles over it, festooning the topmost branches
With clusters of grapes, and pulls itself of its own accord
Up and up: the branches hang there for all to see,
Blushing in the place they have made their own; the green storeys
Sag with Bacchus, whose broad leaves part the lofty foliage —
Even so my gourd, rising on brittle stems,
Welcomes the props that are put there for it, hugging the alder
In the grip of its curly tentacles. It's so determined
Not to be wrenched away by even the wildest storm
That it thrusts out a cable at every joint and, each
Extending two strands, seizes support on this side and that.
It reminds me too of girls spinning, when they draw
The soft heaps of wool to their spindles, and in great twists
Measure off the endless thread into trim balls– Just so
The wandering thongs of my gourd twist and cling; quick
To wrap their coils round the smooth sticks set as ladders for them
They learn to use borrowed strength and, with a swimmer's thrust,
Climb the steep rooms of the covered cloister. Oh, who now
Can praise as he ought the fruits that hang from its branches
Everywhere? They are as perfectly formed from every angle
As a piece of wood that is turned and shaved on a lathe.
They hang on a slender stalk and swell from a long, thin neck
Into huge bodies, their great mass broadening at the flanks.
They are all belly, all paunch. Inside
That cavernous prison are nourished, each in its place, the many
Seeds that promise another harvest as good as this one.
At the approach of tardy autumn, while yet they are tender
And before the hidden moisture that is sealed inside them dries
To leave but the withered shells, we often see the fruit
Handed round among the good things of the dinner-table
And soaking up the rich fat in a piping dish;
For often these juicy slices, served as dessert,
Delight the palate. But if you let the gourd stay
Enjoying the summer sun on its parent tree and only
Set your blade to it late in the year, then after scooping
The flesh from its ponderous belly and shaving the sides
On a nimble lathe, you can put it to practical use as a vessel.
A pint this mighty paunch will sometimes hold, sometimes
Half a gallon or more; and if you seal your jar
With gummy pitch it will keep wine good for many a day.

angled raditions

Fire of Bone

By Jessimond of Emerickeskepe

The word bonfire comes to us from Late Middle English as a combination of the words bone + fire. The term originally denoted a large open-air fire on which bones were burnt as part of a ritual or celebration, but also as a fire for burning heretics.

Modernly defined as “a large open-air fire used as part of a celebration or as a signal.” A bonfire is much bigger than a campfire and is still typically built for celebrations or large outdoor events. While a bonfire is still a controlled fire, its overall size makes a bonfire more hazardous than the simple campfire.

A Fourteenth Century monk of Lilleshall, in Shropshire, wrote:

> *In the worship of St John, men waken at even, and maken three manner of fires: one is clean bones and no wood, and is called a bonfire; another is of clean wood and no bones, and is called a wakefire, for men sitteth and wake by it; the third is made of bones and wood, and is called St John's Fire.* [1]

A century later, roughly the same information was recorded thusly:

> *But in worshipp of seinte iohan the people woke at home & made iij maner of fyres. On was clene bones & no wode & that is callid a bone fyre. A nothir is clene wode & no bones & that is callid a wode fyre fore people to sitte & to wake there by.*
>
> —John Mirk, Liber Festivalis, 1486 [2]

The word balefire has become synonymous with the word bonfire. It comes to us from the Old English bǣlfȳr and the Middle English bale-fyre. Traditionally, however, a balefire differed from a bonfire in that it was a great fire which may or may not have traditionally been made using bales of straw. Like bonfires, balefires are also used for rituals and celebrations, most notably as funeral or sacrificial pyres. The word pyre comes to us from the Latin pyra (“pyre, funeral pile”), from Ancient Greek πυρά (purá), from πῦρ (pûr, “fire”).

Sources:

[1] Hutton, Ronald (1996). *The Stations of the Sun: A History of the Ritual Year in Britain.* Oxford University Press. pp. 312–313. ISBN 9780198205708.
https://archive.org/details/stationsofsunhis0000hutt/page/332

[2] Merriam Webster Dictionary https://www.merriam-webster.com/

Dyeing Eggs RED

By Beatrix Funteyn

In the Orthodox Church, there is an ancient tradition of dying eggs red for Easter. The holiday is called Pascha (**Πάσχα,** pronounced "PAHS-ka"), which is the Greek word for Passover.

The tradition is often attributed to a story about St. Mary Magdalene arguing for the truth of the Resurrection of Jesus Christ with the Emperor Tiberius Caesar. In his skepticism, the Emperor said it was as possible for a person to rise from the dead as it was for a white egg to turn red. In St. Mary's hand and before the people in the Imperial Court, the egg did indeed turn red. In Orthodox Tradition, icons of St. Mary Magdalene often depict her holding a red egg for this reason.

Eggs can be dyed a beautiful red using the dry skins of yellow onions. (Yes, YELLOW onions!) It is my personal habit to collect the onion skins used for cooking throughout the 40 days before Easter to use for dyeing. This generally fills a gallon size freezer bag.

Ingredients:

5 Cups water

2 Tablespoons white vinegar

Papery yellow onion skins (about enough to loosely fill a gallon size freezer bag)

12 Eggs

Directions:

* Combine the water, vinegar, and onion skins in a pot and bring to a boil.

* Reduce heat and allow to simmer for 30 minutes.

* Remove the pot from heat and allow to cool to room temperature (at least another 30 minutes). Strain out the onion skins.

* Add the eggs to the pot and once again bring to a boil. Cook the eggs for 15 minutes.
* Remove from heat, allowing the eggs to remain soaking in the dye for at least an other 30 minutes.

* When the eggs have reached the desired depth of color, remove the eggs from the dye and allow them to dry on a wire rack.

Note: The dyed eggs often have a matte finish and can look a bit dull. You can create a more dramatic effect by gently polishing each egg with a tiny bit of olive oil on a paper towel. This makes them shine like rubies!

Top Ten Herbs for a Novice Herbalist to Grow

By Roscha Georgette

For those who do not know me, I am Lady Roscha Georgette of the Barony of Northkeep, which is within the boundaries of the Principality of Vindheim, Kingdom of Ansteorra. My micro climate is close to I-44, South and East, but North of I-40. You may ask why this is important. Well, if you live near Tyler or Lubbock Texas, both of which are also part of Ansteorra, then your USDA hardiness zone and annual rainfall will differ significantly from mine! I'm in an area that is wetter than some, colder than many, is wooded a bit but not forest-y enough to truly be a forest. ALL of our areas will have unique growing concerns.

I was asked to compose a list of my top ten herbs that a novice herbalist could grow with some success. For me, these are the ones that I've had an abundance of success with (in no particular order):

* Onions
* Garlic
* Mint
* Basil
* Thyme
* Oregano
* Rosemary
* Roses (for hips)
* Mallow
* Peppers

This list is not comprehensive by any means, but rather a short list of things even I could grow. And truly, if I can grow it, anybody can. Each of these plants have dozens of varieties. I recommend getting two of each just to try them out. I grow onions year round. Mallow was used by Egyptian housewives to make an early version of marshmallow treats for their families. Word to the wise, I do not recommend new gardeners try to grow lavender. It will break your heart.

So now lets talk uses! I mean, we all know how to cut an onion, peel garlic, chop, stir. Good, but how do we make herb mixes such as *Herb du Provence* or *Colonial Kitchen Pepper*?

You have to let your herbs dry. Harvest them, strip them from their stems, put them into an inexpensive dehydrator and forget about them for a couple of days. dry. Once dry you can put each kind into a little electric coffee grinder, hit the button, and now you have powdered onion, garlic, etc. However, if your herbs are not FULLY dry you get a gummy mess. It's disgusting and you end up throwing it out, negating months of effort, watering, and worrying ~ just ask me how I know!

Most of these dried herbs, such as onion or garlic powder can easily be purchased at the grocery and its just fine to make your first mix using store-bought.

However, many of the store-bought items, such as Oregano, the food industry decided that we should all only ever by happy with just one kind. Basil is an example. To my knowledge, there are at least 17 types of basil to try to grow!

Once you've collected your precious harvest, and have dried it, please don't cry. Most people do not plant enough of anything to make a serious pile once dehydrated. You end up with a few teaspoons at best, unless your an overachieving nut job and plant fifty tomato plants and wind up with 200 lbs. of green tomatoes because summer lasted forever and winter came early. Again, ask me how I know!

Plant what you like. If its too much, share it with friends. Have an herb party and make big batches of herb mix! There are as many mixes as there are herbs and spices, and they are ALL GOOD! Start a group and share with other enthusiasts. I am good at growing peppers, but suck at mints. Let's trade! When you do your herb party, do a BBQ with a meat you can all agree on and try each mix on a different piece of meat or bread for pesto and try it around and see what the group likes. This will change your life.

Food will come alive. Flavor and emotion. The first time I walked into a Himalayan Pakistani restaurant, I thought I'd gone to heaven. I could barely stop eating for wanting to find what ever that one smell was. That one flavor. It was, exotic and sensual and very over whelming. It really fed the flame of passion in me for the unusual. And it was at that moment I understood the drive by Western Europeans to find a way to have that experience in their lives so much so, they challenged every rule, every myth, every tale to find a way to the East, for spice.

Try this homemade herb blend: 1 tsp EACH of dried Thyme, Rosemary, Savory, Marjoram, and Oregano. Then take some and set it aside. To this part add some Fennel Seed, Coriander, and maybe play with basil. Careful when adding Onion, Garlic, or Clove as these can easily overwhelm the blend. Use sparingly at first. OOh, I almost forgot dried ginger and nutmeg. Mmmm… so good! You can make a blend that is more Italian in nature for pasta, and you can make it with raw herbs to make pesto.

Grind the dry or start with dry ingredients mix it up like we did cinnamon and sugar for toast as kids. You can mix some of the blend with melted butter to spread on sourdough toast. You can also try it with olive oil on French bread, then add some parmesan and toast it in the broiler. There simply aren't any rules. Except, if you don't like it, feed it to the chickens. That's it.

I sincerely hope you find what inspires you!

Coneys & Rabbits & Hares, Oh My!

By Jessimond of Emerickeskepe (*The Fretful Scribe*!)

A while back I came across my absolutely favorite obscure word ~ *Coneygarth*. This being a word wholly unfamiliar to me at that time, I naturally set aside what I was reading in order that I might not only chase down its meaning, but also get a full understanding of its etymology (because this is apparently how my brained is wired). The short answer is that *coneygarth*, alternately spelled *cunnigar*, is nothing more than an archaic term for an enclosed rabbit warren or burrow. coming from the Anglo-Norman *coninger, conyngere*. *Coneygarth/Cunnigar* probably came into use with the Middle English forms of *konyng, conynge, cunning, conig ("cony").* Today, the Welsh word for rabbit remains *cwingen/chwningen.*

The first half of the word *coney/cony* (plus numerous alternate spellings) is what rabbits were once commonly called. The second half of the word *garth/gar* simply means a "small piece of enclosed ground," and is a northern and western English dialect word from the mid-14c. It most likely comes from Old Norse *garðr,* a yard, courtyard, or small fenced enclosure, cognate of Old English *geard "*fenced enclosure," from PIE root **gher*" to grasp, enclose." We get two of our commonly used Modern English words, garden and yard, from here as well.

Of course, my mind is never satisfied with any short answer! Thus, I immediately began to ponder what, exactly, is the difference in the meaning of the words coney, rabbit, bunny, and hare? The word *coney* (co•ney: /ˈkōnē/) seems to have originated c. 1200 CE, abstracted from Anglo-French *conis*, Old French *coniz*, plurals of *conil* "long-eared rabbit" (*Lepus cunicula*) from *Latin cuniculus,* from Ancient Greek **κύνικλος** *(kúniklos),* and is most likely of Iberian origin. The word *rabbit* appears a little while later, around the 14 century, and was originally used in reference to the young of the species, but gradually pushed out the older word coney. The use of the word *bunny* comes in later still, originally meaning simply "rabbit" or "a small rabbit" and most likely comes from the word *bun*, which was a regional word used for both "rabbit" and "squirrel" in England around the 1500s. The word *hare* is a very old one in the English language recorded before 900 CE and appears to have developed from the Old English *hara.* The deeper roots of the word seem to be Germanic in origin, being related to the Dutch *haas* and German *hase*. The Old English *hasu* meaning "gray," may also be connected.

So, that is where the names/words come from, but what are the biological differences between Coney (rabbit) and Hare? This is where it gets more than just a little confusing. Coney and hares are both in the family *Leporidae*, however there are

approximately 30 or so species of hares that all fit into just one genus (*Lepus*). Coney on the other hand branch out across 10 genera, into about 30 species, including the European rabbit (Oryctolagus cuniculus). Their familial similarities include long ears, powerful hind legs, and a divided upper lip. Generally, hares are larger and more powerful than coney and have not been domesticated. Coney were domesticated for meat in the early middle ages and were kept in extensive walled enclosures called coneygarth or cunnigar. Not only can it be difficult to distinguish a coney from a hare, but in some cases their common names are extremely misleading. For instance, the "jackrabbit" is actually a hare, while the a "swamp hare" is in fact a coney. There is a domestic pet known as the Belgian Hare, but it is not a hare at all, but rather it is a coney that has been selectively bred to resemble a hare.

Because their young are born furless and blind, all coneys - with the exception of our native Cottontail* - live in groups of about twenty in underground lairs known as a warren/borough. In contrast, hares (and cottontail) live alone, or in pairs, in simple shallow depressions or flattened nests of grass called forms. This is because young hares are born fully furred and with eyes open.

*The Eastern Cottontail (*Sylvilagus floridanus*) is a New World member of the family *Leporidae* and is the most common rabbit species found in North America.

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~ *The Fretful Scribe*

Bunny-Bunny ~ the wild Cottontail that lives in the *Jardin Potager* at Emerickeskepe!

Photo by Jessimond of Emerickeskepe

SOJOURN (Through Farm, Field, and Forest)

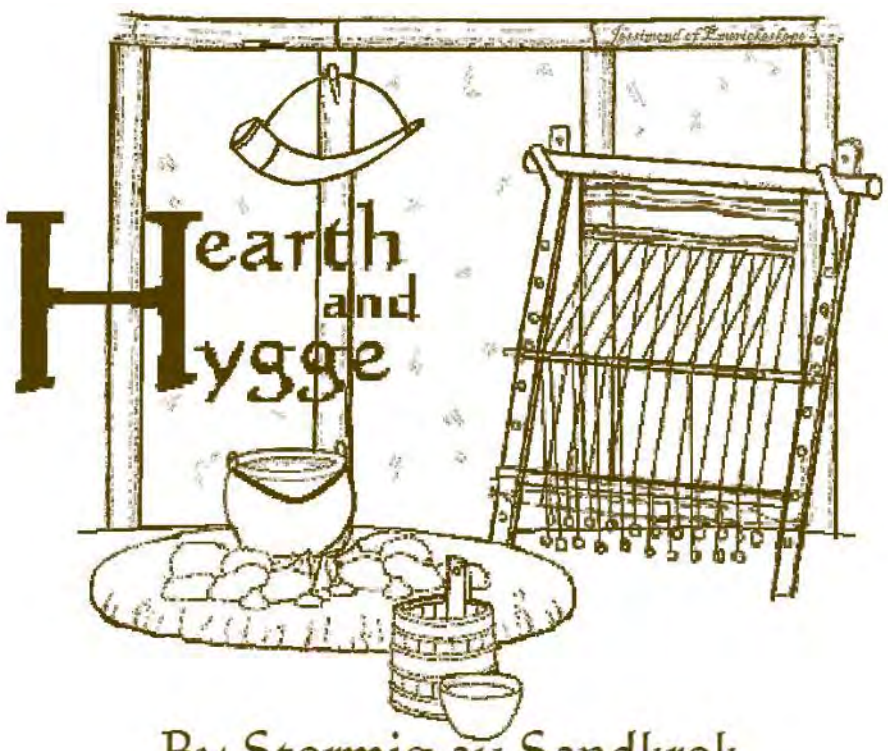
By Tobias of Emerickeskepe

F W F J S M J Q H U H Q M G I J H Q D G O Q M
Z T S S X U X I F O R E S T L A W C R O F T Q
I K Z H A R V E S T Y V R Q G H T U S J O R X
X S M J Z H H B U U F H O X Y M E L P F I B A
U M O M T P Z U L V U U J A M V H L X I F P D
Z B M R B G H Z N W R I J D B F G T V E A U Z
Y N A F A L L O W T I M K T V L M H S L B U H
O E P T A L L O W G S B H O U N D J Y D C A X
H O W A G R E E N W O O D G T C G H T H Q W B
F R I H N Q J C O U N C F Y Z O B D E U N N L
F A R M P A D H O U T X O U V L M B D R Y Q P
T H T W W C G P L N H B B M A N H E R D E R A
C T J W T M O E O W E R E B M R Q Y K L N R R
N A J K S G H T O T Q Y R R E O W W O E Y F C
I X L T T T W R T P A E G T Q I N X K X K S H
D R D A J G E B P A H G S A K M Q S O V E P M
F R K R B G M U L E G E E P R K Z S E J K N E
O K C O D A I C R I R E Y R V T Q D Y Z C Y N
R T V E U C S Q Y O O S M H M H H D K F X V T
A M H A A C R H F X I L P H C F U P A A T U F
G U P K F X S T D D R C P Y R O P H U R S T J
E Y E P X M V E J E I W Z J F O D A F Q L N H
K V O S D N A T S C Q B E L L W E T H E R G G

Find the words in the puzzle. (Answers on page 53)

Words can go in any direction and they can cross over each other.

BELLWETHER	CALABASH	COMMONS	CONEYGARTH	COTTAGE
CROFT	FALLOW	FARM	FIELD	FORAGE
FOREST LAW	FORESTER	FURISON	GREENWOOD	HARVEST
HERDER	HEARTH	HEDGEROW	HERBAL	HOUND
HUNT	HURDLE	HURST	MULE	OXEN
OXYMEL	PANAGE	PARCHMENT	POTAGER	TALLOW



By Stormig av Sandkrok
(now called) Brigiða Jónsdóttir

Heidenisse Küchen

(Originally published in the September 2020 Edition of The Thorny Truth, the newsletter for the Shire of Rosenfeld)

Last Fall we acquired an entire deer and Gird thought a medieval venison dish would be awesome. I hit the Internet and found a recipe for *Heathen Cakes* (or pie). This is a wonderful, aromatic, tummy warming dish suitable for any occasion and any meal.

We took two pies to Rosenfeld's *Yule Revel <December 2019 - Editor>* , have enjoyed it for dinner, and the following morning's breakfast. It's tasty whether warm from the oven or cold from the fridge.

INGREDIENTS

2 pie crusts, pre-baked
2 pounds venison (or beef substitute)
1 small onion, rough chopped
1 carrot, rough chopped
1 stalk celery, rough chopped
1 Tbsp + 1 tsp. Salt
1 Tbsp. Italian Herbs (or another herb blend)
2 large apples, diced
water
2 large apples, diced
1 tsp. Grains of Paradise (or black pepper), ground
1 dozen large eggs, beaten

DIRECTIONS

Combine venison, onion, celery, and carrot in a stock pot with 1 Tbsp salt, herbs, and enough water to cover.

Bring to a simmer and cook until meat is fork tender.

Remove meat from stock and shred.

Cook bacon until crisp.

Remove bacon and let drain on paper towel.

Cook diced apple in bacon fat until tender, about 10 minutes.

Remove apples and drain on a paper towel.

Venison, aromatics, herbs and salt

Combine meat, apples, bacon, remaining salt, pepper and eggs.

Turn into pre-baked pie crusts.

Bake at 400°F for 45-60 minutes, until the egg is set.

Each pie will serve 6-8 people.

Cooked venison, apples, bacon, and remaining seasonings.

Completed pie decorated with a bit of dyed crust.

Cut pie into 6 to 8 slices and serve!

Based on recipe from http://medievalcookery.com/recipes/heathencakes.html

GOAT FAT: Is it the G.O.A.T.?

by Jehanne de Montauban

I have been making herbal salves for over a decade now, and I've usually used coconut oil in them, because it is a natural moisturizer, is antibacterial, and is anti-inflammatory. While I knew that animal fat would have been used in period, I had never worked with it, and I already had coconut oil in my pantry. At some point I became fascinated by the life and incredible works of Hildegard von Bingen, the 12th century abbess, mystic, composer and physician. While reading through a sampling of her works, I noticed that her salve recipes generally called for goat fat specifically.

Hildegard's Violet Salve

In *Causae et Curae* she writes : "Take violets, press their juice, and strain it. Weigh olive oil to one-third the weight of the violet juice, and take goat's fat exactly the same weight as the juice. Let these three ingredients simmer in a new pot and it will become a salve."

(*Causae et Curae* 204, 25, as presented in Hildegard of Bingen's Medicine by Dr. Wighard Strehlow & Gottfried Hertzka, M.D., translated by Karin Anderson Strehlow, pg. 27)

An idea... This may have just been the most available animal fat in Bingen, but it made me curious about what changes its use might have on the texture and efficacy of salves. I decided that I needed to use goat fat in a salve. I didn't want to just buy some, how would that increase my understanding? So I needed to procure some fresh goat fat and render it. I first had to figure out what was involved in rendering goat fat. After reading several blog posts and watching a few YouTube videos, I deemed myself ready enough. I put out the call on Facebook to see if anyone had some goat fat they were willing to part with. Through the connections of Lady Susan the Curious, within a month I found myself the holder of several pounds of goat fat, which I promptly put in the freezer for "when I had time".

Finally, November 26, 2021, I had time. I decided on a dry render rather than a wet render, which means no water is added to the pot as the fat is heated. I also decided against a stove-top or crock-pot method in favor of a cast iron pot over a fire, of course! I chose to do my experiment far from any neighbors, since my readings had mentioned the likelihood of a strong smell. Here is how the process went, with timeline and photos.

Getting Started

I let the frozen goat fat thaw slightly by putting it in a cooler for about 36 hours. I sharpened a kitchen knife and set to work dicing the fat into fairly uniform 1-inch pieces. This was to help the fat to heat through more evenly and hopefully require less stirring.

I started chopping at 11:46am.

Forty-five minutes later, it didn't look like I had made much progress and my hand was starting to hurt. This was discouraging. (11:46 a.m.)

(12:33 p.m.)

It ended up taking me one and a half hours to chop up the goat fat. Even asking my son to take a turn now and again didn't prevent me from forming the start of a blister at the base of my index finger.

Next time I will stop to re-sharpen my knife periodically. (1:20 p.m.)

Despite the challenges, the goal was reached. We had it all cut up and the fire had been going long enough to have a good bed of coals.

I hung the pot from the longest hook and put the lid on. it My goal in this was to heat it up gradually, and then keep it at a medium heat so that there would be no scorching.

I stirred the pot about every 10 minutes or so during the melting process to promote even heating throughout. (1:25 p.m.)

At left: It was about 15 minutes until I started to see liquified fat at the bottom of the pot. (1:41 p.m.)

After 30 minutes, there was only slightly more melted fat. I became impatient with the slow progress at the 45 minute mark and moved the pot closer to the fire. (1:56 p.m.)

It had started to boil briskly, and I noticed it was too hot and moved the pot back to it's original position. I also left off the lid. At 1 hour 20 minutes over the fire it was definitely just lumps of fat in a fair amount of liquid. (2:40 p.m.)

At the 1 hour and 30 minute mark it is back to slowly progressing. I am now focused on keeping the bubbles really small, in hopes that it doesn't cook down too fast and darken the final product. (3:00 p.m.)

2 hours in and it is back to being too cool, so it is not rendering as fast. I lowered the pot with an additional small s-hook, and built up the fire a bit. (3:30 p.m.)

Time for the first round of bottling the rendered fat! I first ladled the fat through a metal sieve into a heat-safe measuring cup. Then I poured it through 2 layers of cheesecloth, and finally poured it through 8 layers of cheesecloth. This first round yielded about 3⁄4 of a quart. (3:56 p.m.)

The remainder of fat in the pot is steadily rendering, but my attention was caught by the fully cooled fat on the ladle.

Look at that beautiful snowy color!

Absolutely no noticeable smell from the fat on the ladle, or even from the pot so far. I was pleasantly surprised by this discovery. (4:16 p.m.)

It looked to me like we were about halfway through the 2 round of rendering. This was only about 30 minutes into it, so it seemed comparatively fast. (4:23 p.m.)

A bit longer than an hour after bottling the first round, it was time to bottle the second. I followed the same steps, and it yielded the same amount. (5:05 p.m.)

3 hours and 42 minutes from placing the pot over the fire, we were starting the 3 round. What was left looked like cracklins to me, so I thought there might not be much fat left to render. I put the lid back on. (5:07 p.m.)

It was still rendering, but slowly. When I opened the lid, this was the first time there was a noticeable smell. It was a deep-fried meat kind of smell, which makes sense. (5:18 p.m.)

Half an hour since the last picture, it was hard to see any changes. (5:47 p.m.)

Another half an hour passed, and there was still not much change. I decided to call it done. I scooped and squeezed as much fat out of the solids as I could, then poured it through the metal sieve first and then through 10 layers of cheesecloth. This final round smelled like roast goat, and it yielded only a 1⁄2 quart jar. Despite the filtering, there are a few bits of discoloration that settle to the bottom of the jars of the 2nd and 3rd round. (6:17 p.m.)

But does it last?

I stored the 3 jars in the back of a cabinet, bringing them out to demos or events as part of my herbalism & apothecary items, and checking them to see how long they would stay shelf stable. It was two years before I was able to detect any change in smell or appearance, and at that point I decided the best use for the 2 & 3 round jars would be suet cakes for wild birds. The 1 round jar was good to use in salves a full year beyond that. My conclusion is that rendered goat fat, free of impurities, is shelf-stable for 3 years.

WWHD: What Would Hildegard Do?

It turns out that although coconut oil has some great properties, it is also comedogenic. Goat fat is also antioxidant, anti-inflammatory, and deeply moisturizing while also being non-comedogenic. When making salves and balms, goat fat also has the benefit of not needing beeswax added to it, due to having a higher melting point. In fact, I found herbal-infused goat fat alone to be too solid to easily apply. In order to make an easily spreadable salve I had to blend in a small amount of a liquid oil. With that addition, the goat fat salve is quite luxurious!

Jardin Potager

(Potager Garden)

Being a class handout from the "Cottager Life" project presented at War of the Rams, November 2024.

***Potāğ**er Noun* ~ This word does not rhyme with cottage-er as it is French, thus it is pronounced *puh-ta-zhay*.

Alternative forms include: poteger, pottiger/potinger, potenger, and podenger.

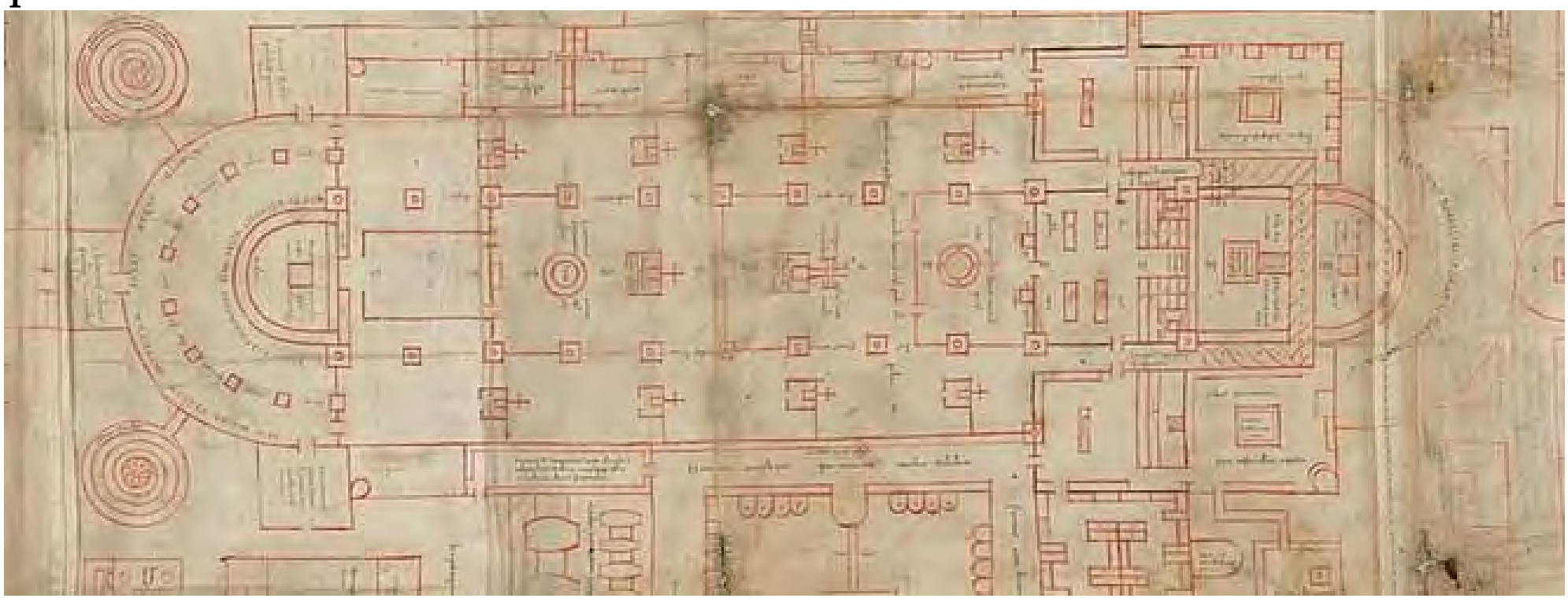
Etymology - Old French potāğe "thick soup or meat-broth," c. 1200, with potage literally meaning "food prepared in a pot, that which is put in a pot". The humble potager is simply a French kitchen garden that originated in the monasteries of Medieval France. Originally they would have included just four beds with a pair of paths intersected at the center to create a cross design. Within a potager garden all the vegetables for a delicious soup would be cozily grown alongside fruits, flowers, and herbs.

Just as today, the ability to grow one's own produce was an important skill to cultivate for medieval peasants. Additionally, both historic and modern potagers are excellent at promoting biodiversity because of how they create a natural space where flora and fauna are equally at home. They also present an amazing opportunity for gardeners to restore a little balance within their hectic modern lives.

Flowers are a practical companion not only because they improve the aesthetic of the garden, but they can also help to deter pests. While some blossoms keep aphids at bay, others attract beneficial pollinators. Wildflowers are particularly helpful in their capacity to act as sacrificial companions that prevent the pests from devouring the vegetable and herbs destined for the soup pot.

Many original common names are completely lost to us, which greatly limits the ability for exact identification of some plants. Thus, I am not including a list of all the possible potager plants with this class. In *Edible and Medicinal Plants in the Cloister Gardens of West Europe (800s–900s AD)* we read that three period documents - "*Capitulare de Villis* by Charlemagne, the poem *De Cultura Hortorum* by Walahfrid Strabo, and *The Plan of St. Gall* included some of the most comprehensive lists of edible and medicinal plants that were commonly found in early monastery gardens. The *Capitulare de Villis*, written by the great medieval emperor Charlemagne, who ruled much of Western Europe from 768-814 CE, contains the names of 90 plants and trees. *The Plan of Saint Gall*, a medieval layout design of a ninth century Carolingian monastic compound (c. 820–830 CE) not only included basic drawings of the buildings, but also showed an orchard located within the cemetery. The trees of the orchard, when combined with the plants listed with three different gardens, included a total of 47 plants. The main walled vegetable garden has eight plant beds in the center that were accessible from all sides, with another eight backed up along the perimeter stone wall. A medicinal garden was conveniently located near the infirmary. Lastly, a vegetable garden was divided into 18 beds in two rows and was situated across from the home of the gardener. These raised beds were framed with boards with

paths providing access along the side of each bed. Lastly, the poet monk Strabo, who many believe to have been the chief gardener at Reichenau Monastery at the time, included 24 plants in his *De Cultura Hortorum*.



The plan of Saint Gall / photo public domain on Wikimedia Commons

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How to Make and Use Parchment

By Maelgwyn Dda and Willoc macMuiredaig

Part 1: Making Parchment from the fresh skin of an Animal

Parchment refers to any writing surface made from the untanned skin of an animal – usually goat, sheep, or cow.

Very fine parchment from a young animal (usually a calf) is called vellum.

The oldest surviving pieces of parchment are from Egypt, around 2nd century BC. Paper began to replace parchment in the 15th century.

Today, only special documents are created on parchment.

Who should make parchment?

Artists and crafts folk, scribes and non-scribes.

The parchment you receive from a Regional Parchment Workshop is produced by volunteers for the scribal community. We do not ask for monetary compensation, just "sweat equity" – either try to help or send a volunteer from your household/ community to help at a local parchment workshop to keep this going. It takes about 2 weekends of hard smelly work to produce a batch of parchment, so show your appreciation.

Supplies

* Sources of hides: farmers, hunters, and people who want to help
* Hydrated lime & water
* Salt, if salting for storage

Tools

* Barrels & buckets & stirring paddles
* Stands & tables & tarp
* Frames / Hearses & cords
* Knives & scrappers & punches – dull sharpness & sharp sharpness
* Gloves, goggles and gear
* Templates for layout, and shears/snips

Production Process:

* Pre-scrape – when received or 1 week before workday
* Make life easier later on, avoid smell in summer
*Thaw in water first if frozen
*Use goggles, use gloves if desired
* Work over barrel with dull knife or carefully with a sharp one.

Liming – 1 Week BEFORE Workday

* 6-8 cups of lime to 30 gallons of water to lime three hides (about 4 cups/hide)
* Stir daily for 4 days. Longer if cold, shorter if hot. Not recommended over 100 F.
* Might as well make multiple batches in multiple barrels
* Use goggles and gloves when pulling hides out
* Spread on tarp and rinse thoroughly with hose

Scudding – Workday Step 1

* Use goggles and gloves. You may want a mouth/nose cover.
* Spread over barrel
* Strip off hair with hand, dull scrapper, 2-handed hide scraping knife
* Work tough spots against grain, push hard
* Flip hide to remove flesh, fat and membrane rinse in water to remove lime

Stretching – Workday Step 2

* Many methods, authentic and not. I use punched holes and lacing to frames
* Gloves and goggles optional
* Lay frame on a big table, spread the hide in the middle
* Start on opposite sides, pull just enough to levitate.
* If/when holes pull through, re-punch them further in and keep going.
* Make a second pass around the hide, tightening as needed.

Scraping – Workday Step 3

* Gloves and goggles optional
* 2 goals, removing fat/membrane/epidermis and stretching hide.
* Scrape the hides evenly, in all areas of the hide, rotating the frame as needed.
* Don't cut the cords. Or you. Or the hide. Just don't cut anything!
* Stretched hide will turn white. Keep working if areas are still translucent. Use blunt scrapers to get more aggressive if needed.
* Tighten cords and then make a second pass of scraping the hide.

NOTE: If bacterial damage has made the grain side uneven, use a palm sander to even out the grain.

Drying – Workday Step 4

* Air and sunlight, no drips
* 2 hours to 2 days

Cutting – Workday Step 5 (or the next day or two)

** EASIEST TO SAND WHILE ON THE FRAME ** (See next section)

* Templates in the sizes you want to arrange best use of space
* Heavy shears or aviation snips to cut

Part 2: Using Parchment from a Parchment Workshop

Supplies:

* Sandpaper
* Chalk (from cuttlefish or eggshells)
* Gum Sandarac
* Soft plain bread
* Pencils
* Gouache Paint
* Test scraps

Tools:

* Hand sander
* Sanding block
* 2 Pouncing Bags
* Blue and Yellow strings
* Ruler
* Calligraphy pen
* Paintbrush(es) (Size 0 or smaller)
* Calligrapher's bridge (optional)

How to Use:

Before you begin, determine how you plan to use it. Typically, the flesh side takes ink better, the hair side takes paint better; however, other factors may be more important.

The parchment may need to be sanded before use. Use a medium-fine grit, sand until it feels like velvet.

The parchment may have flaws – bumps, holes, etc. Don't fight them – think about how to work with them. They make your piece unique.

Once it is sanded to the consistency you want, you can draw on it with a pencil or silverpoint. (Later, to erase pencil without disturbing paint/ink, use a soft piece of bread.)

Pounce the areas you plan to paint with chalk (calcium carbonate – from cuttlefish or eggshells) to absorb the skin oils. This is the bag with the blue string. Brush or shake off any excess.

Pounce the areas you plan to ink (calligraphy) with gum sandarac, to make the parchment a bit "sticky" and your ink edges "sharp". This is the bag with the yellow string. Brush or shake off any excess.

Contact a parchmenter if you have any questions or problems.

More Information: https://www.facebook.com/groups/scaparchment/

Parchment workshops at Gulf and Pennsic Wars

References:

Accumulated knowledge from the Ansteorran Parchment Project (Biaz, Maelgwyn, Elena, Ciara)

Rennicks, Rich (2022-12-29). "The History Of Vellum And Parchment". The New Antiquarian. Antiquarian Booksellers' Association of America.

Image:

de:Eygentliche Beschreibung aller Stände auff Erden, hoher und nidriger, geistlicher und weltlicher, aller Künsten, Handwercken und Händeln ..." /

from Jost Amman and Hans Sachs / Frankfurt am Main / 1568 /

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Oxymel – From Medieval Medicine to Hydrating the Dream

By Elias de Birton

Originally published on ***The Long Trail*** as part of the

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A few years ago, I took on a hike that proved to be a little too much, and I had to revise my route while on the trail. Fortunately, the trail was a relatively popular one, and I was able to ask another hiker for directions to a closer trailhead. Even more fortunately, she was camping there and was kind enough to walk with me and give me a lift back to my car.

We chatted as we walked, and she told me a bit about her experience thru-hiking the Appalachian Trail (I don't remember her government name, but her A.T. name was "Tinkerbell" and her Linville Gorge Rat name was Rat Mama – if by some strange coincidence you are reading this, Tinkerbell Rat Mama, thank you again!). One thing she mentioned was that thru-hikers carry mustard packets for muscle cramps. She explained it wasn't for the mustard seeds, though, it was for the vinegar.

I was intrigued by the idea of using vinegar to help head-off cramps, but not terribly keen on eating mustard straight out of the packet. It also wouldn't really fit my "medieval trekking" goals! I remembered seeing something about a vinegar-based drink called switchel used by 18th century reenactors, though, so decided to look into that. A Townsends YouTube video (a popular 18th century sutler-turned-educational channel) describes switchel as a mix of water, vinegar, molasses, and ginger, which sounded promising. The video also states that the drink is thought to have originated in New England or the Caribbean, though, so it wouldn't be the best fit for my 14th century English persona. Drat!

Switchel was not a dead-end, however. It was introduced in the video as "related to a number of very similar drinks that have been used or made for a thousand years in various cultures around the globe", which meant I just needed to look for some of those! A few internet searches later led me to oxymel.

Oxymel is a mixture of honey and vinegar (often mixed into water) and was a bit of a health fad a few years back, leading to several studies evaluating its efficacy as a functional food. It has a long history, however, used medicinally by Hippocrates (460-370 BCE), Galen (2nd century CE) and Ibn Sina (c. 980 – 1037). Pliny the Elder provided a recipe for oxymel that involved boiling honey, vinegar, salt, and water together and then allowing them to ferment. I made a version of this (sans fermentation) by mixing one part apple cider vinegar with one part wildflower honey and adding a pinch of salt.

Jon Townsend, "18th Century Energy Drink - Switchel 18th Century Cooking", posted January 26, 2015, by Townsends, YouTube, 4 min., 32 sec., https://www.youtube.com/watch?v=e8sPaesPOiU

N.S. Darani, M.A. Vaghasloo, A. Kazemi, H. Amri, T. Rampp, and M.H. Hashempur, "Oxymel: A systematic review of preclinical and clinical studies," Heliyon 9, no. 12 (2023):e22649, https://doi.org/10.1016/j.heliyon.2023.e22649

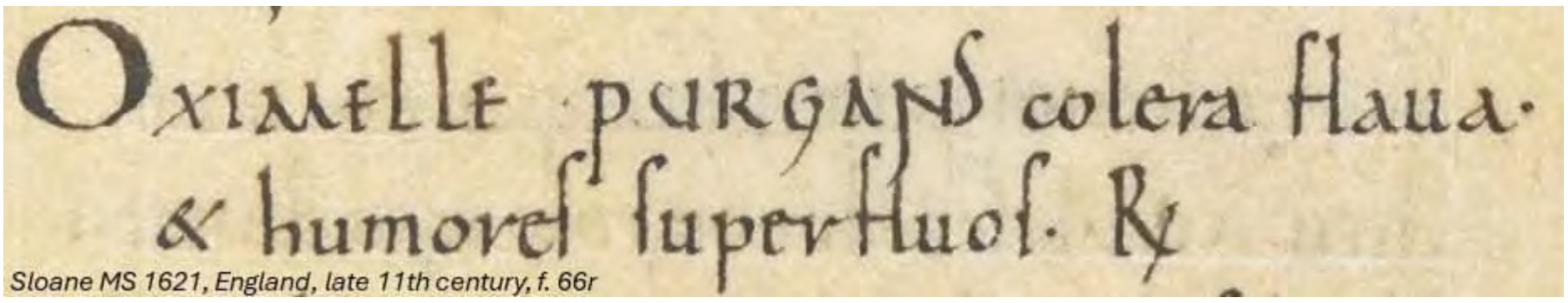
Ibn Sina referred to it by the Persian name sekanjabin, which is still a common drink in Iran; A. Zargaran, M. M. Zarshenas, A. Mehdizadeh, and A. Mohagheghzadeh. "Oxymel in medieval Persia." Pharmaceutical Historian 42, no. 1 (2012): 11-13.

Described in Book XIV, Chapter 21; Pliny the Elder, The Natural History, trans. John Bostock and H.T. Riley (Taylor and Francis, 1855), http://www.perseus.tufts.edu/hopper/text?doc=urn:cts:latinLit:phi0978.phi001.perseus-eng1:14.21

I carried this mixture on a summer hike, and a couple of tablespoons in a cup of water was quite refreshing!

I wanted to dig into oxymels a little bit more, though, and preferably try to find something closer to what my persona might possibly have been familiar with. That led me to a blog post by British Library Medieval manuscripts blog on medieval gardens and the medicinal plants grown in them. This post included an image of a page from a late 11th century manuscript providing a recipe for oxymel. However, a cyber attack in October 2023 had disrupted access to the British Library's online collections, so I wasn't able to do much more digging until the Library restored online access to 1000 digitized manuscripts a year later – fortunately, the manuscript that had caught my attention was one of them!

Antidotarium and medical recipes, with some prayers and texts on musical theory (Sloane MS 1621), is a medical manuscript written in Latin, c. 1075-1125. While this is still a few centuries early for my 14th century persona, I still wanted to investigate it a bit. There appeared to be 10 recipes for oxymels (f. 64v-67r), each recommended for a different ailment. These were clearly medicines to be "prescribed", not everyday beverages.


Sloane MS 1621, England, late 11th century, f. 66r

Unfortunately, I couldn't find any transcriptions or translations of the manuscript, so I had to muddle my way through a few of the recipes myself – you can find my transcriptions and translation on my website. All the recipes seemed to follow the same general pattern – infuse various herbs in vinegar for a few days, cook the infusion "to the middle" (reduce by half), strain out the herbs, add honey, and reduce again. There was some variation, though, in how long to infuse the vinegar, what amounts of everything to use, and of course what herbs were used (depending on what the oxymel was to treat). Looking through the recipes, I realized that I wouldn't be able to replicate one of them exactly; some ingredients in each recipe were either unclear, difficult to obtain, or now understood to be unsafe. Therefore, I decided to make an oxymel utilizing some ingredients that appeared in multiple recipes, in similar proportions to what was called for (as best as I could work out), and using the described method.

Recipe

Ingredients:

* Dried hyssop, 7 grams
* Celery root, half a handful (about 50 grams)
* Fresh marjoram, 4 grams
* Fennel seed, 11 grams
* White wine vinegar, 300 mL
* Honey, 250 – 300 grams

Alison Ray, "Blooming lovely", British Library Medieval manuscripts blog, April 26, 2017, https://blogs.bl.uk/digitisedmanuscripts/2017/04/blooming-lovely-in-early-medieval-english-gardens.html

London, British Library, Sloane MS 1621, f. 64v.

"Our first 1000 digitized manuscripts return", British Library Medieval manuscripts blog, October 3, 2024, https://blogs.bl.uk/digitisedmanuscripts/2024/10/our-first-1000-digitised-manuscripts-return.html

Steps:

* Remove the outer layer of the celery root and cut it into strips
* Mix the herbs and vinegar in a sealed jar
* Place the vinegar infusion in a cool, dark place for 3 days
* Over a low flame, reduce the vinegar infusion by half, stirring regularly
* Strain the herbs out of the vinegar
* Mix vinegar and honey and cook over a low flame, stirring constantly
* Bring the honey and vinegar mixture to a simmer, skim off any scum that rises to the top
* Remove mixture from heat, pour into a jar, and store in a cool, dark place
* Take 20 to 30 mL straight, or mix with a cup of water

I selected ingredients that were mentioned in multiple recipes, that I knew should be reasonably safe to consume, and that I could buy at local stores (although I did need to go to a specialty shop for the dried hyssop). I used white wine vinegar, since one of the recipes (f. 65v) specified "white vinegar", and wildflower honey, simply because I had some in the cupboard.

The hyssop, fennel seeds, and fresh marjoram were easy enough to mix with the vinegar, but I was less sure about how to mix in the celery root. Since a "bundle" and "two handfuls" (f. 66v) were called for in different recipes, I decided to cut it into strips and work with it that way. As a note, an alternative translation of *apii radicum* is "root parsley", which resembles a parsnip – a "bundle" would be a reasonable way to describe an amount of such an ingredient (but I could get celery root!).

I let the vinegar and herbs infuse for 3 days in a cabinet, then poured/scooped the mixture into a small saucepan. Before simmering, the mixture smelled a lot like salad dressing, which did not make me hopeful about the flavor of the final concoction! As it reduced down, however, the savory notes receded and the steam started to smell more floral and sweet. It was also obvious after straining that the vinegar had taken on a bit of color.

One recipe called for straining the infused-and-reduced vinegar through linen cloth (f. 65r), but I opted for a coffee filter. I was curious, so I tasted it before adding the honey – it was a lot of flavor, but not necessarily a bad flavor! Very tangy, but also floral and a little sweet.

The completed oxymel has the consistency of cough syrup, and packs quite a punch taken straight. The *Antidotarium* prescribes 2 cochlear, or about 20 mLs (f. 66v), with no mention of dilution, but I found it quite pleasant mixed with water (and even better with a little gin, but mixology is beyond the scope of this article!).

While I think oxymel has a lot of potential as a "medieval Gatorade" (especially with a little salt thrown in), it was clearly intended to be used as a medicine. To try to both honor the historical use while using it for a modern purpose, my next project will be mixing up a batch for trekking while keeping medieval humoral theory in mind. If getting overheated and sweaty while hiking indicates that I am too "hot" and "wet", maybe some cooling and drying herbs are called for. Strawberry and wood sorrel might be a good fit, and I think the resulting oxymel would be tasty, to boot!

I washed the saucepan, then added the vinegar back in with 250 grams of wildflower honey. I had intended to use 300 grams (for equal starting weights of vinegar and honey, per f. 66v), but I was a bit short. I stirred this mixture over a low flame until all of the sugar crystals in the honey dissolved. Most of the recipes called for reducing the mix down again, but I could see that the honey wanted to scorch, so I brought it up to a simmer, skimmed off the foam (a mead-making habit, more than anything), and pulled it off the heat and poured it into a jar for storage.

An Irish Farm

By Elizabeth of Roxbury-Mill

My grandma's childhood home sits atop an Irish moor.

The farmhouse perched on a mound in glory stands for a century and more.

The stones are cool and weathered in the windows broken and jagged glass.

I glimpse through the soot stained window and see a dirt floor covered in ash.

A timber beam supportive it's bones

still standing a happy home until its horrific demise.

I imagine my grandma playing until the red flames did rise.

In the kitchen I see once was a home so lovingly adored.

After faithful years of service sadly now utterly dejected and ignored.

At her grave I vowed to visit her farmhouse that stands on an Irish moor.

The home for centuries battered by Mother Nature

once full of life and love in its core.

For all time in memory and in my heart remains a most glorious site.

My Nana's farmhouse that weathers the test of time my fathers ancestors birthright.

Columella: A (relatively) brief overview

By Tót Derega

I sought out *Columella's De Re Rustica* ("On Agriculture") initially as a matter of curiosity. I was looking at chicken breeds as I spent long hours on an ambulance during Covid, dreaming of the day I would have a small holding of my own. Dorking chickens have probably one of the funniest names of chicken breeds, and the breed is purported to descend from chickens brought to Britain by Roman Legionnaires during the invasion and subsequent colonization. I saw this claim and it was repeated several times that Dorkings match descriptions of chickens in Columella's famous agricultural treatise, and are similar to mosaics uncovered in Pompeii. Naturally, I had to see for myself if it was true.

I found a translated set of Columella's agricultural treatises online and dove in. *De Re Rustica*, as it turns out, is a collection of 13 separate documents, called books, on different topics in a single subject. The first twelve books start out in a letter format, addressed to one *Publicus Silvinus*, possibly a neighboring farmer of the author, or perhaps a literary device. I haven't read enough other ancient Roman documents to know if the length and detail of *De Re Rustica* is normal, but the works could be seen to constitute an infodump of truly breathtaking proportions, sent through the mail.

The first book is opened with a detailed refutation of the opinions apparently being espoused by contemporary politicians that the soils of the heart of the Roman Empire had been spent, rendered increasingly infertile by overuse. He follows with a list of other works concerning agriculture, and encourages the would-be farmer to frequent his farmland daily if possible. This seems to sprout from an assumption that the would-be farmer has regular business of some sort in town, such as at the Forum and the markets.

Keep in mind that ancient Rome was very much a slavery-based economy, and Columella casually references this throughout his works. He details the characteristics of desirable farmland, including the quality of the neighbors, and encourages modesty in the acquisition of land as it is better to properly cultivate a small field than improperly cultivate a large one, or worse, leave tracts of land unmanaged to be reclaimed by the wilds or trampled and ruined by cattle.

He instructs on where and how a house should be built, down to specifying the facings of rooms and windows, stables, workrooms, storage, and rooms for slaves, servants, and tenant-farmers based on their assigned job and social status. He gives advice on what slaves should be assigned to what tasks.

In the second book, soils and their preparations are discussed, as are the virtues of various types of manure. In the preface, Columella discusses the belief that the earth and soil are becoming progressively more barren and less productive, and he discusses as an example the observation that land which is freshly cleared and cultivated after a long period of fallowness or forest is most productive, but then yields less and less in subsequent seasons. Columella observes that the long period of fallowness and/or forest has "fattened" the land on the nourishment of fallen leaves and branches, which are then rendered absent in the clearing of land. This is an observation that hints at modern regenerative and no-till methods that call for leaving crop residues in the fields to protect them from erosion and to return carbon and nutrients to the soil. He discusses two methods of draining fields that are two wet using ditches, akin to canals and tile drains. He discusses plants to look for in uncultivated land that indicate the presence of good soil and springs. He describes a rudimentary soil test, involving soaking a sample of soil in water, straining it well, and then tasting the water. He describes how to yoke and drive the oxen who plough the fields, though not in the terms of someone familiar with ox-driving. He describes the angle of the plow, the speed and methods with which the oxen are to be driven in different conditions. He also discusses the care of your oxen after their labors are done (a massage where the yoke sits, a pint of wine, and then as much water as they can drink). He discusses when land should be ploughed and how to check that it has been ploughed properly, down to how

wet or dry soil should be, times of the year to plough, angle to plough on a slope, and even the phase of the moon that's best to spread manure on your fields (waning, apparently, to keep the weeds at bay). He then goes on to an in-depth discussion of the different types of wheat, legumes, and other crops, along with expected yields and uses. After this, he discusses when best to plant different types of grains, crops, and fodders, and this gets confusing because Columella uses different calendars than the Hipparchus calendar used by contemporary 1st century Rome. In the footnotes, it is clarified that Columella used the calendars of Eudoxus and Meton, and adaptations to public sacrifice days thereof. Next, he treats on the means by which crops are threshed and stored, and how to select seeds to keep back for the following season. A rudimentary pre-treatment he recommends is to soak seeds in (olive) oil lees or nitre to make it less susceptible to weevil damage. To further reduce weevil damage, one must complete their threshing and store their grain or seeds before the moon begins to wax, apparently.

Cultivation of fields under seed is next discussed, according to the crops sown therein. He totals the expected hours and kinds of labor required to bring crops from seed to threshing floor, presumably to give a baseline against which a farm owner may judge the efficacy of his own efforts. Next, he moves on to discussing the merits or faults of various types of manures, both vegetable and animal. One should take care to "fasten a piece of oak wood in the middle" of their compost pile, however, to ward off serpentine visitors. For some applications, a mixture of manures may be stored together, but for other applications, different types of manure should be kept separate.

We're still not done yet, as here the author shifts to discussing meadowlands and their management as either pastures or hayfields.

Now we return to a more in-depth discussion of preparing the threshing areas, tools, and grain or seed storage. Then, to round out this book, he takes a moment to discuss what farm tasks should and should not be undertaken on holidays.

Book 3 opens with a quote from Virgil, whose agricultural advice Columella clearly holds in great esteem as he quotes him with some regularity. The vine (grape) is revered above all other woody plants. He describes different "types" of vines, according to the terrain and climate to which they are best suited. He mentions that grapes meant for eating fresh, what we call "table grapes", should only be grown in the regions close to a city, so they may be sold at market while still fresh; wine grapes may be grown much further afield.

He gives a list of wine grape varieties, describing their performance on trellises versus trees, and a subjective and nonspecific description about the wines those grape varieties produce. When Columella discusses "trees" in this context, he seems to be discussing what we may know as an "Arbustum": a plantation of trees, usually poplar, elm, ash, or in particularly marshy areas, willow, that have had lower branches lopped off, and the vines trained up the trunks and strung between trees. It isn't fully clear if all the branches are removed, killing the tree, or if the tree's canopy is maintained. Presumably this was a situation where the answer was considered obvious to the reader. Extant frescoes and later writings, however, would seem to imply the second.

He next discusses economic concerns of viticulture, and addresses what were apparently common misgivings and pitfalls. He takes particular care to stress the importance of acquiring a skilled vine-dresser without balking at the cost, and cautions against purchasing slaves at auction for a reduced price, even if they are purported to be skilled at this most essential task. In fact, he recommends paying top price for the slave to perform this job as part of vineyard startup costs. He gives these expected startup costs as a total of 32,480 sesterces. He assures readers that seven Iugerum (acres), thus begun, will pay back the 6% interest on this initial sum. He also recommends setting and selling rooted cuttings for additional profit.

Interestingly, Columella then immediately recommends against purchasing rooted cuttings yourself, instead encouraging the establishment of a nursery using local stock. Here we enter a description of cultivation methods, from the particulars of digging trenches into

which cuttings are to be placed, advice about the soil of your nursery area, the spacing and length of rows, and of course the spacing of the slips themselves. Then he describes how to go about selecting which vines from which to take cuttings, where to cut, and how long to observe the slips for quality (2-4 years). He recommends selecting cuttings from vines of high quality, whose grapes have a good taste, and the most prolific bearers. You may graft these cuttings onto less vigorous vines, or root them as starts.

He describes which parts of the vine are best to take cuttings from (in a rather meandering and confusing way) as being the middle part of a vine shoot, if that middle part consistently bears with relative heaviness where other similar sections of other vines do not. He says that the "country people" describe these vines as "umeri" or shoulders, presumably indicating their appearance and location. He spends several pages defending this assertion, before returning to the primary discussion and describing the various methods of preparing the ground for transplanting cuttings. He ranks the preference of ground situation as unused ground being most desirable, through to renewing an old vineyard being the least desirable. To use ground where a vineyard once was, you must first thoroughly plow and dig up all the old vine roots and burn them, then spread dried manure heavily on the field to revive it. Then is further discussion of the quality of various classes and types of soil as pertains specifically to a vine nursery, as well as the desired slope of the vineyard and nursery (generally speaking, not westward). From here, we progress to planting the vineyard itself. The method is very similar; he gives a description of measuring and trenching, specifying the width and depth of the trench, and the spaces between trenches, and describes preparing a device that can be used to measure the trench and ensure that all necessary specifications have been met without insulting the contractors hired to perform this trenching for you. He briefly discusses an alternative planting method in which vines are planted in clusters that look like the 5 face of a 6 sided die. He describes the means by which the plants are to be laid in the trenches, and gives some basic soil remediations and fertilizing recommendations. He strongly recommends using rooted cuttings, or quicksets, from the nursery he previously instructed in making, and says that using unrooted cuttings results in weaker, less prolific vines. He describes the best time of year and soil conditions under which to plant. And now we have yet another extremely detailed propoundment on the virtues and flaws of cuttings taken from different points in the plant.

Columella offers advice on the length of the cutting as well, and the depth to which it should be planted. He encourages one to keep their four or five most favored and productive varieties of vine, so that if something should happen to harm one variety or even two, a harvest may be gained from the remainder. He recommends separating them by variety as best one is able, but also admits that this is something he himself has yet been unable to achieve due to simple human error in mixing up slips, cuttings, and quick-sets. He recommends a campaign of heavy cross-grafting for older vineyards, in order to better distinguish between the various types based on color, vigor, and time of ripening, and use this to set blocks apart by variety. He recommends separating by variety primarily for ease of harvest, so that each section may be harvested at the perfect moment of maturity without fear of immature fruit from an intermixed variety causing wine to go sour. He also mentions that wine of mixed varieties is far inferior to the wine of just one superior variety, and doesn't keep as well besides. It also, he says, makes it easier for the vine-dresser to prune properly according to each variety's preference and needs, and allows the manager to "face" each variety towards the cardinal directions as it also prefers and needs. He does at the very last of this book mention that fruit trees may be planted in nursery to the north of the vineyard, for eventual taking of cuttings or transplanting.

Book Four opens with a discussion of the criticisms that book three was apparently met with, and defending his statements in that book. At issue primarily appear to have been the depth of trench Columella demanded, and his recommendation that each quickset be staked individually instead of the apparently more common practice of staking one quickset to two support, such that the vine is split in two. He follows then with an admonishment against the "nature" of many people to lose enthusiasm for a project such as a vineyard long before it begins to produce a vintage, and in so doing undermines the productiveness of their

vineyards through premature neglect; or worse, to undertake the project with more enthusiasm than care, thinking it is better to cultivate by any means than by good means; or worst of all, to not start a vineyard at all because they begrudge the expense and work to start.

And now we come to the meat of this book: the means by which vines are cultivated, a very densely written topic indeed. Thankfully, here we have some clarification on the previously described method of planting in trenches. Columella takes particular care to state several times that starts must be planted so they run straight up the side of the trench to their stake, perpendicular to the level of the ground. So where he previously appears to be saying that all the shoots are to be brought to the "ends" of the trenches and staked, implying that they're being laid along the bottom of a trench lengthwise until they reach the end, he actually meant that they are to be placed perpendicular to the ground level and brought straight up the sides. This, he says, makes the next task easier, which is that of monthly hoeing and weeding around the cuttings through the first spring and summer, into fall. Also during this time, he recommends keeping the vine pruned to just two straight vertical shoots, one primary and one secondary in case something happens to harm the primary. The vine should be tied loosely to the stake until it secures itself firmly with tendrils, and once the two shoots have hardened, the weaker one should be cut off. The vines are topped once they have reached adequate height (about four feet or so), to encourage them to strengthen and thicken instead of staying long and slender. Any leaves and vines from this trunk below the three and a half foot mark should be kept faithfully pruned, and taken off when they can be removed by light pressure from the fingers, but any vines or shoots above three and a half feet should be left until autumn pruning. He recommends avoiding using the pruning knife in the heat of summer, as this damages the vine, as does trying to hand prune anything that requires more force and strips off part of the bark. If it is absolutely necessary to cut in summer, it should be cut a distance away from the mother vine, leaving a spur, so that the mother vine won't be damaged. Then, in the autumn but before the cold of winter, the upper roots to about a foot and a half deep should be dug out and cut off a finger's width from the main root,, to force the plant to grow deeper. Columella calls this being "ablaqueated". He recommends ablaqueating your vines every year for the first five years, then once every three or four years thereafter. Then he recommends either leaving the ablaqueated roots uncovered if a mild winter is expected, otherwise "leveling off" the cut roots before the Ides of December, treating with dung or six sextarii of stale urine, and then re-burying. First year vines are now cut back to one or two eyes above the ground, usually in autumn but sometimes in spring where the winters are cold, and staked to reeds or briar canes with wires about a foot off the ground for support (old canes that won't root), such that the vine itself stays straight, and tied with soft materials that won't cut into the young vine.

After the first vintage is taken off (about a year and six months), any gaps in the vineyard should be filled with cuttings or "layers", vines buried close to the mother plant and brought back up to the surface at a neighboring stake. This layer is partially cut off from the mother plant the following year, after it has established its own roots, and fully severed the second autumn. The horizontal portion is also dug up and removed, to force the layer to put roots down deep instead of close to the surface.

After three years, the vineyard stakes are replaced with much sturdier ones, usually set to the north of the vines and a foot away from the trunks so the roots aren't damaged, otherwise set very deep halfway between trunks to support the weight of vines and fruit. Consistent pruning and trimming back of leaves, vines, and roots is to continue this whole time. In the fourth year, the vines are pruned "in the form of a star", about a foot short of the trellis cross-bar, so that any tender growth from this head may be draped over the trellis and not touch the ground. He states that four year old vines should have three or rarely four hard wood branches, and here he discusses the different types of supports which I confess I have difficulty following. My best guess is that he has supports going along the rows and perhaps another taller support going across, perpendicular to the rows, to fully shade the ground beneath the vines, otherwise he has a grid lattice all on an equal level or a series of

poles topped with an X of arms. He does mention that a single string support may be more appropriate in cold places or temperate places without violent storms, but that on steep hillsides and places with strong storms, being supported "on all sides" by "troops in square formation" is best.

He recommends subdividing your vineyard into plots of 100 vines or half jugerum for access, ease of inspection, and the like. He states that frames are raised no less than four feet above the ground, and no more than 7, but of course the vines will not reach 7 feet until the vineyard is very mature, or not even 7 feet if you are in a place that is hot, dry, or subject to strong storms. He describes methods and timing of tying vines, which I will not detail here. However, he does add a detail about the staking, saying that the vine's arms should be "bent inward" at the main paths and bypaths, so they are not injured by people and animals traveling by, lending strength to my last supposition for star-shaped supports, at least for growing vines. A vine that is weak should be cut back to two eyes, encouraging vigorous growth further up the frame. Each arm of the vine head should be kept to a single fruiting branch until the vines are of "proper strength", and then after each arm may be allowed to bear two fruiting branches but not more than eight per whole vine, unless "its very excessive fruitfulness shall demand more".

Now that we have at last arrived at a more mature vine, which Columella nonetheless deems a 'juvenile', he says that the arms should not be allowed to be larger than the stock, and when lateral growth is allowed, the upper hard canes should be constantly cut away so as to not go beyond the frame. This allows the vine to always be renewed with young branches, which should also be trained to the frame, or, if damaged or short, cut down to a stub of one or two eyes and allowed to regrow the following year.

Thus having concluded Columella's instructions on the keeping of a newly planted vineyard to maturity, he now reverts to instructions on renewing an old and neglected vineyard, or one that is trained to a different support system. Primarily, this advice consists of determining whether to cut back the old wood, and how far, whether to renew through layers, or, in some extreme cases, to induce old but sound trunks to put forward new shoots by manuring heavily and then causing an injury in "the greenest part of the bark" between three and four feet tall with the sharp point of an iron implement. Once you have these new shoots, even if they are only a couple of leaves, you can expect them to put forth a branch of firm wood the following year, and once you have this you can cut off the overgrown parts and bring the remainder back to the supports. In the worst case, where a whole vine must be removed, it should be done by digging down and cutting off below ground to allow the roots to send up tender young vines with which to restart the process. He strongly recommends against cutting off a mature vine above ground, as it would be damaged beyond repair.

If, however, your vineyard failed due to poor soil or situation (placement), then Columella states that attempting to renew it is a waste of time and money. If your vineyard is of poor quality, then you may improve and renew it by grafting better stock onto the vines. First, however, we discuss more particulars about pruning, such as the timing, the length to which different canes are cut based on the direction they face (point?), and the process and method from the ground up by which each section of vine is tended or "dressed" yearly (this is the primary job of the skilled Vine-dresser Columella previously exhorted readers to acquire). He also say that the three goals of vine-dressing must all be kept in mind during this process: fruit, fruitfulness for the following year, and longevity of the vine as a whole. He describes protecting cut old wood with earth moistened with oil lees in order to protect the vine from the sun, weather, and insects. It is clear, in the care and detail with which the author describes the minutiae of the tasks, considerations, and methods of pruning, that he did not exaggerate the importance of a skilled and intelligent person being in charge of dressing the vines. This discussion takes up a not insignificant portion of this book, in fact.

After this, he discusses the anatomy of tools used in vine-dressing, the best woods to use for stakes and supports, and gives advice on the particulars of binding the vine to the supports. He recommends the vineyard then be dug in late winter or early spring, before the

vines begin to bud. The vine-dresser's work still is not done, because now as the vines sprout they must go through and pinch off excess foliage by hand while it is tender and green, prune down exuberant growth to allow only one fruiting sprout per node, or even prevent a heavy bearing vine from bearing for the year to allow it to rest. Now, finally, we come to instructions on grafting.

Grafting is best done in the spring, but may be done in the fall. When selecting scions for grafting, he encourages us to follow previously given advice for selecting cuttings, and adds some additional advice about the length and other characteristics of the desired scion. Then the methods of grafting are discussed, from most common to least common. A brief discussion about special tools used for some of the more uncommon types of graft follows, and then a more in-depth discussion of the various tools and supplies needed to keep a vineyard. Columella even asserts that these are so essential, so necessary, that if you do not already have the supplies for vine supports and ties available already, then you may as well not start a vineyard at all for the cost and inconvenience of acquiring them in winter.

Thus, at the end of the fourth book, the author now describes the means and methods of setting up willow osiers, reed thickets, and chestnut trees for the express purpose of using these as structural materials in a vineyard.

Book 5 opens with a discussion about where Columella's previous volumes on viticulture were felt to be lacking in detail, and he defends himself, saying that he only ever claimed to offer an overview of the broadest topics in his familiarity, not an exhaustive discussion of every minutiae. He then proceeds to a discussion and explanation on the means of measuring land, though he also asserts that this is the realm of a surveyor's knowledge, not a farmer's, and to not hold against him any errors made as he does not claim to be an expert on the topic.

An *Iugerum* of land, which is a term used above, is a plot made by conjoining two square actus, and measuring 120 feet by 240 feet. These are Roman feet, not modern Imperial feet, mind. This opening section contains a very useful table giving the subdivisions of an *Iugerum*, the Roman square footage, and the equivalent English square footage. Suffice to say, I won't copy the entire thing here, but I will give a partial table for the sake of the curious. He gives a brief lesson in geometry, giving the basic calculations for various types of shapes, and then he instructs how to calculate the number of vines one could plant within a given space. Oh, you thought we were done with vineyards? Over a hundred pages of waxing poetic on the topic seemed like it was enough? Not for Columella! But don't worry, we're almost done with the topic.

He now directs his attention to the viticulture of Roman provinces in turn. He first speaks of a vine that is cultivated to grow upright without supports, as if it were a tree, and of this he greatly approves. He clarifies that the people of the provinces rarely trench their ground as the Romans do, and though he finds furrows and planting holes to be inferior, he admits that the grapes of the provinces do not largely suffer from the change in planting methods. As he states that ploughing between rows of the vineyard is common outside of Italy, he allows for spaces up to 10 feet between rows, or as little as 4 feet if hand cultivation with hoes is the planned method. He generally recommends that his advice in his third book be followed in most other respects regarding preparing for the planting of vines. He discusses again various means of pruning based on the desired growth form of the vine, whether short, upright and unsupported like a little tree, trained over a support called a "horse", bound up in circles on a pole, or even left to lie across the ground.

This discussion concluded, we move to the cultivation of trees used in an arbustum. He states that the poplar is considered best of all for arbustums (arbusta?), however most people do not use it because cattle and other animals do not like to eat poplar leaves, and so most people plant elm or, in mountainous regions, ash; both of which are much better preferred by animals for fodder.

He describes the means by which nursery beds are prepared and seeded with elm or planted with cuttings, and how these beds are cultivated. He states that the growing seedlings and saplings are dug up and replanted frequently, to prevent the roots from going too deep and

making it hard to dig them up later. He gives instruction on how to lay out the mature arbustum, including allowing space for growing grains between the trees if you want to.

Then, he discusses the ways in which trees are pruned and grown so they can act as trellises for the vines. Then, once the tree has reached “a good age”, he recommends drilling a hole into it as deep as the pith to allow passage of the moisture from the upper part. Finally, he

Latin name of subdivision	Number of Scripula	Fraction of an Iugerum	Roman Square Feet	English Square Feet
Scripulum	1	1/288	100	96.70
Quadrans	72	1/4	7200	6962.40
Semis	144	1/2	14400	13924.80
Dodrans	216	3/4	21600	20887.20
Iugerum	288	1	28800	27849.60

says that the vine should be paired to its tree before the tree is fully mature. He then mentions for the first time that trees should be marked when being transferred from bed to bed and then to grove, so that they may maintain the same orientation to the quarters of the sky throughout their lives. He doesn't say why this is important, only that it is. He then goes about instructing how specifically to train the vine to the trees, and into a more in-depth discussion of why pruning is done where and when it is, as well as the distinctions and virtues of the different types of shoots.

Now he mentions the variances of these techniques based on province; such as that the Gauls used a "guelder-rose", possibly a "cranberry tree" or a dogwood. A variety of small trees can be used for this, though he cautions against using willow except in very marshy areas, since willow spoils the flavor of the wine. For arbustums of these smaller trees, they don't usually grow grains in the spaces between rows, and those rows are spaced only 20 feet apart, but they are otherwise cultivated in the same ways as already given.

This, finally, ends the discussion about cultivating grapes, and segways nicely into a discussion about other trees that were cultivated at the time, starting with the venerable olive. He discusses ten different varieties of olive tree, including what their fruits are used for (eating vs oil making), the types of slopes, soils, and climates they prefer. He cautions against planting olives on land where oaks were grown, because the roots from the oaks, even dead, will kill the olives.

As with vines, he opens with instructions on taking cuttings and setting up a nursery for your olive grove, and the care, pruning, and transplanting of your olive trees as they grow. In this passage we learn that it was apparently common practice to throw barley seeds into holes where trees were to be planted, to encourage fermentation. Also for the first time, here Columella mentions fencing trees to exclude cattle and prevent damage. From here, things get fairly routine. For every type of tree, Columella gives the same pattern of advice: Nursery, planting, pruning, and ongoing care.

He has some specific advice on figs, almonds, and hazel, and the he describes the process by which a "Tarentine nut" can be made from almonds or hazel. As best I can tell, a "Tarentine nut" is a soft-shelled nut of any given variety. He then moves on to giving advice about pomegranate, pear, apple, quince, service-apple, plum, peaches, apricots, and mulberries. Next he discusses carob, with just a little bit more about peaches and almonds. Then he discusses the methods by which fruit trees can be grafted. Finally, he discusses a plant called the shrub-trefoil, which he says fattens all livestock from chickens to cows. He states that the whole plant is cut down at three years and fed to livestock. Possibly this is Birdsfoot Trefoil, however further description isn't given.

Book 6 begins the discussion of livestock. Our author begins with an argument in favor of

raising cattle as well as farming crops, because despite the opposing economic goals, the two endeavors benefit each other. First, and in Columella's opinion most important, is the ox. He describes the ideal conformation, or physical type, of the young bullock. Then he describes the methods of breaking and training oxen. It is his opinion that the breaking and training of oxen is best done between the age of 3 and 5, much older than modern oxen are broken and trained. Next he describes the care and feeding of oxen. He describes some remedies for maladies such as nausea (make them swallow a whole chicken egg on an empty stomach, then pour garlicked wine into it's nostrils the next day). He describes the means by which "plague" is spread (pig or chicken poop getting in the cattle feed), and how it is treated (isolating sick animals and distancing them from healthy, and giving certain herbs or feeds). Additional remedies include tying the tail down, force-feeding hot water and oil, and then forcing the ox to move vigorously for a mile and a half. Failing this, the hooves may be deeply trimmed, it may be given a suppository, it may be bled from the tail, have it's ears or tongue cut, have it's forehead burned. Colic, apparently, may be cured by the sight of a duck swimming on the water. Injuries caused by these treatments may be rinsed with ox urine, honey, or sealed with pitch and oil. I cannot say for certain that these treatments closely resemble the treatments of similar human complaints, but it wouldn't surprise me if it were indeed the case. He describes how to build a stanchion with which to restrain your ox while administering these myriad remedies. He briefly discusses cows and bulls, then moves on to inspecting the herd and building enclosures and cowsheds. He then discusses the management of breeding and calving, the worming of calves, and the castration of calves. The topic of oxen and cattle thus exhausted, he moves on to horses in similar formula. Horses are honored with a quote from Virgil describing the… fervor of their passions. Mules and donkeys (asses) come next and complete this book.

Book 7 gets right to the point, opening with further points about donkeys and then moving on to sheep. It is clear within the first few lines that the ancient Romans regarded sheep as a triple purpose animal; providing dairy, wool, and meat in equal measure. He describes the means by which sheep with more interesting-colored but low quality and coarse wool (possibly referring to hair sheep?) are crossed with fleece-producing sheep and the third generation on from the cross have fine fleeces with the more interesting color. He describes how to tell if a white sheep carries hidden genes for coloration: check the color of the tongue and palate. A peculiar disease in sheep, which Columella knows as erysipelas or pusula, is apparently only effectively treated by burying the affected sheep alive, on it's back, at the entrance to the sheepfold, so that the flock runs over it and thus drives out the disease. I wish the author or translators had seen fit to give a better description of the nature of this disease besides recommending a frequent inspection of the hides of the sheep in order to detect it early. This doesn't seem to fit the description of modern erysipelas, which is a bacterial joint infection called joint ill. He uses erysipelas later when describing what could be ORF in lambs, so perhaps this is a general term for skin ulcers or scabs? This rather confusing section finishes the discussion of sheep and we proceed to goats, which are very similar in their care except that they should have no bedding. These smaller 'cattle' now sufficiently expounded upon, we discuss the process of cheesemaking. He describes not only the use of rennet from a lamb or goat kid, but also describes several plant sources; wild thistle flower, safflower seeds, or the liquid drawn from green shoots of a fig tree. Columella appears to approve of the flavor of cheese made with this last option best of all. He says that some people curdle fresh milk directly in the pail by putting green pinecones in with the milk, or flavor their cheeses with thyme or other herbs. He also describes hard cheeses, pressed in wooden molds, brined cheeses, and cheeses smoked with applewood as all being "not unpleasant". After this digression, we discuss pigs and swine. Interestingly, the pigs of Columella's time farrowed in the fifth month instead of the fourth that we are familiar with today. He gives particular instruction on the spaces to prepare for pigs and warns against the potential of cannibalism by sows against her own piglets or those of others. Next is dogs, and here Columella describes the different purposes for keeping dogs on a farm. He disdains the hunting hound on a farm, as he says it distracts the farmer from his purpose, and he lauds the guard dog and the sheep dog, what we today would call

livestock guardian dogs. He recommends that a dog meant to guard the farm yard be dark colored all over, with a loud and threatening bark and growl, large head, broad chest and shoulders, drooping ears, and thick joints and legs. It should have a stern, vigilant, and aloof temperament, not given to fawning on strangers, but also not so vicious it attacks the household. Sheepdogs he prefers to be white, so they are easily distinguished from wild dogs that may attack the flock. They should be more slender than a guard dog, but less so than a hunting dog, and with strong thick legs and joints. All dogs are fed on bread mixed with whey or bean water. Puppies were given goat's milk if their mother's milk was insufficient. Puppies' tails were docked at 40 days old, as this was believed to prevent rabies. A brief discussion of dog-specific treatments for fleas, ticks, ear problems, and scabs completes this book.

Book 8 is dedicated to my original purpose for reading Columella, at long last! The chickens! The romans kept chickens, guinea fowl, and what they call the "rustic" hen, which may be partridges according to the footnotes. He mentions capons, but states that capons are not made by removing the sexual organs; instead they burn off the spurs and that is considered a capon. Columella's description of his preferred chickens are of a dark or red color, with dark or black wings in the roosters. He disdains white chickens as too delicate. They should be large with white earlobes and ideally five toes. Males should have white earlobes, red or white wattles, and gold feathers on their hackles and neck. This could indeed describe the red variety of Dorkings, though the breed standards have changed modernly. He instructs where and how to build a henhouse, which he says will benefit from having some of the smoke and heat from cookfires diverted into it, meaning he wants it placed very near the kitchen. He recommends building or carving cubbies into the walls for the laying hens and says this is cleaner than hanging wicker baskets for the hens to lay in. He describes covered troughs with holes in the sides used as feeders and waterers. He says that water contaminated with excrement will give your chicks "the pip". He describes feeding and protecting the flock, collecting and setting eggs under a hen for her to hatch. He describes the "egg song" and also states that pullets can be prevented from going broody by putting a feather through their nostrils, since pullets are not good to allow to sit on eggs due to their inexperience. He, like me, bears no mercy for egg-eating hens. When placing eggs under a hen, there must always be an odd number and the desired amount changes by month. According to our esteemed author, the shape of egg will determine the sex of chick: long pointed eggs are roosters, and rounded eggs are hens. Columella's chickens apparently started pipping at eighteen days instead of twenty one. Freshly hatched chicks are place in baskets and fumigated with pennyroyal to stave off "the pip". Romans had several different ways of trying to preserve eggs through the winter, from packing in salt or brine, to burying in beans, bran, or chaff. He describes the process of force-feeding chickens to fatten them for market. This completes the discussion of chickens and we move on to pigeons. Care of pigeons is similar to chickens, though there is less profit from force-feeding them. There is a somewhat confusing passage where he describes placing (sealing?) the young of a kestrel in a pot in the pigeon house and this prevents the pigeons from absconding. Pigeons are raised for profit, though it isn't clearly stated the destined fate of the offspring, presumably it is as food similar to quail. The force-feeding process for pigeons, unfortunately, involves breaking the legs of fledglings so they can't leave the nest. The author assures the reader that tying the legs will not work as well and that breaking the legs is the only way. He spends a little time on thrushes and turtledoves, then we broach the topic of peafowl. The means of building enclosures are described, and the means by which eggs are gathered. Columella recommends using a large hen to hatch peahen eggs, though he states that the poultry-keeper will need to turn the eggs frequently because they may be too large for the hen to turn easily. Finished with peacocks, we move on to waterfowl, or as our author refers to them, "amphibious birds".

Geese are the first order of waterfowl, and Columella approves of them greatly. He prefers large white geese. Like peafowl, he recommends allowing a chicken to brood and hatch the goslings. He cautions against letting young goslings be stung by nettles, stating that this will kill them. The young are easily force-fed and fattened for market. The care and keeping

of ducks is similar. He recommends that each duck pond have an island on which is planted taro, tamarisk, rushes, and the like. He recommends supplementing your duck population by taking wild duck eggs and allowing domestic ducks to hatch them. And from here we progress to fish. Yes, the ancient Romans farmed fish and shellfish, including the sea snails from which the famed purple dye was made. Their coastal fish ponds were seven to nine feet deep, with channels allowing for the tide to bring fresh seawater and grates to prevent the farmed fish from swimming away at high tide. Very little is said about the methods of raising freshwater fish, but they are, presumably, similar. This completes book 8.

Book 9 deals with wild animals and bees. He begins by describing the means of setting up a game park, fencing an area, or setting aside woodland for the rearing of these game animals. These include deer, wild boar, rabbits, oryx, and more. He states that hand-feeding these captive game animals is the best way to ensure they have everything they need. This is a brief section before we discuss the keeping of bees. He begins with referencing previous authors who, in his estimation, have already treated on the subject better than he could, and states that he is only covering the topic for the sake of thoroughness. Hives were expected to survive no longer than 10 years even with regular care and replenishment. He recommends to set aside bee feeding grounds that are covered with flowering plants, herbs, trees, etc., and to not allow livestock to bother these grounds. It is his opinion that Thyme and Greek Savory make the best tasting honey. He recommends placing hives at the bottom of a valley, with the hive opening facing the midday sun in winter. Beehives were made of bark, woven reeds or sticks as the best options, and clay, dung, or brick as the less desirable options. He describes building a structure to house the beehives with multiple stalls, open to the front and back for access, and stacked three hives high, the entrances protected with colonnades or awnings made of branches and mud. Entrances should be multiple, and only large enough to admit a single bee. When purchasing hives, you should look for activity, with bees on the porch and a loud response when the hive is knocked, indicating good population. If it was needful to transport a beehive, Columella advises this be done by carrying it on the shoulders at night, and letting the beehive "rest" during the day, with water and food provided while the bees are closed up. He describes methods by which bees can be trapped and followed back to their swarm or hive. Apparently, bees do not like the sound of brass being beaten and will all land on nearby surfaces when they hear it. Sometimes they would also put herbs in a hive box to attract a wild swarm. He discusses splitting hives, merging hives, and finding and killing queens, though he calls them kings because Romans were like that. He describes treatments for various hive concerns, and then details the timings of care throughout the year. Before opening a hive, the keeper must be sober, washed, clean, without strong odors from food, and must have abstained from sex for a whole day. No reason for these restrictions are given. In preparing hives for winter, gaps and entrances are sealed up except for one to allow bees to come and go, and leaves or straw are piled up on top of them. He even mentions that sometimes a small bird is killed and gutted and placed in the hive for the warmth it's feathers offer and the food it provides should the bees run out of stored food. He also describes a method of feeding the bees by passing small pipes of sugar water in through the entrance. Even in ancient Rome, some beekeepers transported their hives from province to province or island to island, chasing what we know today as the nectar flow. He describes next the methods of harvesting honey and wax, which completes this book.

Book 10 deals with gardens and horticulture. It is written in verse, as we see with Virgil's writing. Personally I find this style of writing very difficult to read, so forgive me if I omit anything of particular importance. My solace is that this book is relatively short at about 20 pages, half the length of the other books in the collection. Columella recommended that gardens feature a shrine or statue of Priapus, as this was supposed to frighten off thieves and mischief-makers. At the autumn equinox, when grapes are being pressed, the soil of the garden is to be turned if it's been a wet season, but let alone and prepare or repair irrigation channels if it's been dry. In spring, break ground and fertilize with any manure available, though donkey or human manure was apparently thought best. Then sow seeds for flowers, herbs, lettuces, Garlic, Lupines, Parsnips, Radishes, and Carrots; and all others such as

Cabbage, Dill, Fennel, Rue, Alexander, Safflower, Caper, Elecampane, Leek, and "Mother of Leek". Water freely and weed diligently, and then when Aries rises "over the waves", set your transplants. Nex, plant Cress (which was used to purge worms), Savory, Cucumber, Cardoon, Coriander and "dragonroot" (possibly Cuckoo-pint, Edderwort, or Italian Arum). As the days begin to lengthen, we are instructed to harvest Garlic, Onion, Dill, and Blue Poppies and take them to market, then plant Basil, and prepare for storms and pests to start attacking the garden. Some sacrificed a suckling whelp or placed the skinned head of a donkey at the edge of the garden to ward off disease, some hedged their gardens with Bryony to protect from storms, others hung "night-flying birds" on crosses and drove them away from their homes. The identity of these birds is not given. Diseases and pests were also treated by sprinkling oil lees, Horehound sap, or Houseleek juice, and if all those failed, some people led a young girl who had just reached menarche around their garden three times with bare feet, bare bosom, and disheveled hair, and this was supposed to cause all the caterpillars and worms to fall to the ground. Then harvest the early lettuce, leeks, and parsley (possibly meaning celery as well). When Sirius rises, it is time to harvest early Figs, Mulberries, Apricots, Peaches, Plums, and Damsons. Sow Turnips in August, just before the Grape harvest, which if you recall was the starting point of this book and reaching it again signals the end of it.

Book 11 opens with a discussion of the duties of a bailiff, and there appears to be some desire to compare these duties to those of a gardener. As best I can tell, in this context a bailiff is the servant in whose charge is the day to day running of the farm when the owner is absent, rather like a modern farm manager. In brief, they want someone who has been trained from a young age in all the various aspects of farming, someone who is strict but fair with their subordinates, who won't be unduly distracted with sex or other extracurricular pursuits, and who is happy staying on the farm and only leaves for necessary errands. They want someone who will seek to learn and improve, but only as it relates to their skill and knowledge in farming, and who is diligent with getting tasks done on time. Here we have a fairly useful calendar framework of tasks as they should be performed throughout the year. In mid-January, any pruning that wasn't finished in autumn can be completed, as can weeding, thinning the hedges, cleaning meadows and hay pastures, and breaking rich ground. Starting February first, autumn-sown crop fields should be hoed, vines should be trenched, propped, and tied, and bitter vetch may be sown. Fruit tree nurseries are started, and the first sets are transferred from nurseries to their places in the orchards. Starting in mid-February, fruit trees may be grafted, trees cut down for building, stakes and props made to refresh vineyard supplies. Pastures and orchards are fertilized with dung. At the start of March, scions are selected, new planting holes and trenches are dug, olive trees are fertilized with unsalted oil lees, roses are tended and planted, and seed nurseries are started. In mid-March, all other ground should be broken, millet is sown, anything that has not yet been pruned should be, and cattle should begin getting castrated. In early April, seed nurseries are weeded and sheep are washed with soapwort to prepare them for shearing. In mid-April, olive trees and any remaining fruit trees are grafted, the previous year's fall calves are branded, vines are given their first trim of the green shoots, and vineyard repairs are finished. Starting in early May, the crop fields are weeded, the first hay is made, nurseries are dug up frequently to keep the roots loose for transplanting, dirt is dug up around established trees, and if it is cold, olive trees may be pruned, and olive cuttings set in their nursery. Beehives should be inspected every 10 days or so starting in early May. In mid-to-late May, sheep are shorn, lupines are plowed under, flocks are surveyed, and in established vineyards the dirt is dug around the vines. In early June, the threshing-grounds are prepared for the harvest, any remaining ground is plowed, any already plowed ground is gone over again, and in orchards the dirt is dug and mounded up around the tree trunks. Established vineyards are cultivated again, and fodder and tree hay starts being fed to cattle if green grass is no longer available. From mid-to-late June, vetch is harvested for fodder before it seeds, barley and beans are harvested, and beehives are cleaned out and honey harvested. In early July, fallow land is planned for the second time, stumps are removed during the waning moon, and ferns and sedge are uprooted, in

addition to any remaining tasks from the end of June. In late July, the straw from the previous harvests is cut, soil is dug around trees and heaped up around their trunks, and the ground is plowed to prepare for a second sowing. Tree foliage should be cut in the morning and evening for the animals. Sesame is sown if it hasn't been already, and wild fig branches are hung on fig trees to speed their ripening. In early August, the honey is harvested if ready, and figs and other trees are "emplastrated". Hot and dry regions begin preparing for the grape harvest. In late August, grapes in dry and warm places begin coming ripe and start to be harvested. If the grapevines are looking thin, then lupines are planted and turned under once sprouted as a manure for the grapes. In wet places, tendrils are stripped to prevent the fruit from rotting. Raisins and dried figs are made. In early September, the vintage continues and is prepared for in places where the grapes are not yet ready. Those who "season" wine boil seawater. In late September, all provinces start bringing in the vintage. We are recommended to test for ripeness by inspecting the seeds for a dark color. Some wine jars were treated with pitch, while others were scoured and washed out with seawater, wine presses and tubs cleaned, scrubbed, and pitched if needed. A store of firewood should be available to boil the must down to half or even a third of it's volume. Salt and spices for seasoning the wine should be on hand in sufficient quantities before a single grape is harvested. Beds are prepared for Turnips and navews, and vetch and fenugreek are sown for fodder. Millet is harvested and lupines are sown. Calavance is sown for food. In early October, the coldest regions harvest their vintage, two-grained and emmer wheat are sown. Medic and Hemp-seed are sown. In late October, seedlings and shrubs are transplanted, Elms are mated to their vines, vines are pruned back and propagated, nurseries are weeded and dug, and any remaining pruning of seedlings and sprouts should be done. Seeds should be sown and harrowed in. Ditches, channels, drains, and gutters are cleaned out and repaired. Oxen are fed on ash or oak leaves and must for at least 30 days starting now. Mixed woods are planted if desired. Olives are stripped for green oil, when the fruits are starting to speckle black, since white olives make bitter oil. In e November, beans are sown on the day of the full moon, and fields, vineyards, orchards are dug and fertilized with dung. In late November, beehives are made, as are poles and props for vineyards. We are strongly urged to make use of artificial light to get everything done in this season. Tools are sharpened, repaired, or replaced for the next year. In early December, anything not yet accomplished must be done. In late December, olives are gathered and prepared, frames are placed in the vineyard, and vines are staked. Early flowering trees are grafted and pulses can be sown. In early January, the first is observed by starting work of every kind for good luck, but the soil is not worked until after the 13th.

This yearlong schedule completed, an accounting of fodder needed per yoke of oxen is given. He next accounts how to plant a hedge to protect gardens from cattle and thieves. He gives next a month-by-month schedule of planting a garden, in much more easily understood language than our previous book. He gives more detailed instructions about Garlic, Cabbage, Lettuce, Cardoon, Mustard, Coriander, Leek, Parsley, Parsnip, Skirwort, Elecampane, Alexanders, Mint, Rue, Thyme, Marjoram, Dittander, Beet, Poppy, Dill, Chervil, Asparagus, Radish, Cucumber, and Gourd. Apparently having women in the garden was considered detrimental to plant health, particularly if she was menstruating, because this is mentioned several times. A simple cold frame with a glass top and planting in baskets to be kept indoors are both described as means of extending the season for cucumbers, which were very popular. We continue with capers, onions, navew, and turnip. Seeds were soaked in the juice of house-leek to protect the seedlings from pests and disease. This completes book 11.

Book 12 covers the duties of the bailiff's wife. Columella begins with a lament about the vapid laziness of his contemporary noblewomen, who he felt had abandoned the necessary domestic activities and skills that sat as counterpoint to those of the men who toiled in the fields, and states that because of this sorry state, many of these activities and skills have been taken up or thrust upon the bailiff's wife as a matter of course when they should have been the purview of the wife of the proprietor. She will be responsible for the household

provisions and the health of the household, deciding what can be preserved and set aside, what eaten now, and sending for doctors if someone is sick or injured. She must know where and how to best and properly store each thing to make it last, and keep in her head an inventory of the house's stocks and provisions, including furniture and clothing, and she must periodically inspect everything to ensure it remains in good condition. She should be industrious; spinning and weaving in those times where she has little else to do, and overseeing those also assigned to these tasks. She monitors the rest of the household and questions anyone where they are not supposed to be or who isn't doing what they should. She oversees the weavers, the cooks, the stewards, cellarmen, and shepherds; she should be present at milking and sheep shearing, or when things are being measured and weighed for use, she is responsible for keeping the infirmary, mangers, cowsheds, and kitchens clean, as well as overseeing the cleaning and airing out of other rooms and furniture. Glass and pottery jars were used for preserving, with the assistance of vinegar and hard brine. We are given a very basic recipe for vinegar, which is suspect in light of modern knowledge as it calls for a pound of yeast. Brine was made by dissolving as much salt in rainwater as possible, such that a bit of cheese floats in it. The pickling of various herbs and vegetables is next described. Sour milk (likely yogurt) was infused with marjoram, mint, onion, and coriander, then after the whey was drained off over the course of 10 days, it was seasoned with dry thyme and marjoram with minced leek, and then after another two days salted and sealed. Two alternative flavoring blends are given as well. Pickled lettuce was also described, as was the preservation of onion, apples, pears, and similar fruits. Beeswax water and honey water was also made and preserved with the honey and comb harvest. The process of drying apples, figs, and raisins is described. A fig vinegar is discussed, which appears as best I can tell to be a natural ferment. It is the duty of the bailiff's wife and her staff to prepare the various tools for the vintage, from weaving baskets to making additional ten or three modii vessels, and ensuring everything is properly clean. The process of boiling and preserving must is detailed. Must was boiled in lead vessels, since brass spoiled the flavor. Must was mixed with pitch and resin to preserve it. This prepared and preserved must was used in turn to preserve the next year's wine, though boiled seawater, ashes, and pitch were also used. He describes a process by which they attempted to salvage or prevent soured wine, and the means by which sweetened wine was made. The processes of making horehound and squill wine are described, along with squill vinegar, wormwood wine, squeezed must, Greek wine, myrtle wine, and raisin wine. Then a thin wine, used for laborers, is described, along with mead and fruit syrup. The preservation of cheese in must and the preservation of grapes to be kept green is also detailed. Now we return to preserving pomegranates, quinces, and other fruits; then pickling elecampane. The preservation of olives comes next, followed by the making of olive oil and gleucine oil, and the preparation of oils for ointments. Then we rather abruptly swing around to a brief instruction in the salting of pork, and then a return to the pickling of vegetables and the preparation of mustard. We finish with a recipe for a salad and a digestive tonic. This completes Book 12, and the main body of *De Re Rustica*, though it doesn't include his treatise On Trees, this is noted in the earlier text to contain very similar information to that which was already discussed in the rest of the works with additional specific details.

Columella's works are very dense with information, and distilling them down even as much as I have here has been a challenge, and I had to leave a great many minute details out. The translations I have total 651 pages (not counting the Latin transcript that opposed each translated page), and I hope that somewhere within this relatively brief overview you've found something to inspire you to take a closer look at this collection for a future or current project.

SOURCE:

Lucius Junius Moderatus Columella; On Agriculture, In Three Volumes. *I Res Rustica I-IV*

With a Recension of the Text and an English Translation by Harrison Boyd Ash, Ph.D.; Associate Professor of Latin, University of Pennsylvania-Cambridge, Massachusetts; Harvard University Press ~ London; William Heinemann Ltd. First printed 1941 Reprinted 1948, 1960 from Internet Archive: https://archive.org/details/onagriculturewit01coluuoft/page/n39/mode/2up?ref=ol&view=theater

Rice Cultivation and Double Cropping in China

By Izumo no Suou (formerly Morina O'Donovan)

Rice has long been a staple grain of many Asian nations and has many practical applications. Not only is it used for food, rice can also be used to make paper, glue, and a variety of other household objects. The grass part of the rice plant can be used to make broom straws. And the powdered outer hull of the rice can be used to refine steel during the smelting process (Let Us Explore Rice Husk Ash Use In Steel Industries, 2024). These are just a small number of uses for the rice plant. Where does rice come from, and how did it spread? What effect did it have on the cultures of Asia? These are all important questions to ask when studying these cultures. For this article, we will restrict ourselves to the study of rice in China and particularly look at how the technological impact of double cropping this plant allowed China to grow.

While there are two major subspecies of rice (Oryza sativa) grown in the world today, we will be dealing with the short-grained sticky rice species known as Oryza sativa japonica (Rice, 2025) (Oryza sativa, 2025). Rice is an annual grass that can grow to about 4 feet in height (Rice, 2025). The earliest cultivation of rice is unclear, with some sources claiming it took place as early as 11,000 years ago, while others taking a more modest stance and claiming a history of no more than 9,000 years. Encyclopedia Britannica dates the cultivation of rice to 7,000 – 5,000 BCE (Rice, 2025). While there are several possible regions of origin for rice cultivation, the most likely is in the lower Yangtze River Valley, where a wild precursor species resided in swampy areas. (The Origins and History of Rice in China and Beyond, 2019). Regardless of the true date and location of earliest cultivation, it is clear that rice has gone hand in hand with the growth and development of Chinese culture for quite some time.

While rice thrives in wetlands, the earliest cultivation seems to have been dryland cropping, that is planting the crop in drier areas and flooding the fields as needed. The invention of the rice paddy seems to date to around 5000 BCE (The Origins and History of Rice in China and Beyond, 2019). The creation of wet rice farming and rice paddies has many advantages over dry rice farming, but did require stable land habitation and ownership. Investing the time to create a permanent planting area like a rice paddy or terraced flooding area presupposes that your people will be in one area for a long time to work that land, after all. Further, wet rice farming is quite labor intensive and requires a larger farm population to produce, meaning that this more stable agricultural development both required and enabled population growth in rice growing regions.

We must note, however, that China as an entity was not originally anchored in the southern part of the modern country, where rice is most easily produced. Rather, the Chinese people were building states and warring with each other in the northern part of the country, closer to the Yellow River than the Yangtze. As such, large canals began to be constructed in the early 5 th century to carry rice and other goods produced in the south to northern areas to supply troops and households in the north (The Beginning of Chinese Civilisation: A Bowl Full of Rice, 2024). This canal system, in English called the Grand Canal, can still be viewed today. Such monumental construction during turbulent wartime is testament to the vital importance of rice to the war effort and to life for the Chinese people in general.

By the Han Dynasty (206 BCE – 220 CE), Buddhism had arrived in China and rice became not only a staple foodstuff, but also a suitable offering to the gods. It was also critical for Buddhist followers, who were quite often vegetarian due to their beliefs. Cultivation technology grew rapidly during this time period and the eating of rice became something of a cultural marker for the Chinese people (The Beginning of Chinese Civilisation: A Bowl Full of Rice, 2024).

Until the 8th century or so, rice was still consumed alongside millet, sorghum, and even wheat in the north, especially by poor subsistence farmers (Technological Advances During the Song, 2025). Rice was extensively traded in the south by even the relatively poor but had not yet come to so fully dominate the culinary landscape as it does today. During the Tang Dynasty (618 CE – 907 CE) and into the Song Dynasty (960 CE – 1279 CE) several things happened. The most important was the importation of a new rice strain from Champa, in present-day Vietnam. It ripened earlier than the existing Chinese strains and was additionally drought-resistant. When the Song Emperor Zhengzhong (988 CE – 1022 CE) heard of this strain's drought resistance, he immediately ordered its importation to China (Technological Advances During the Song, 2025).

The early ripening of the Champa rice strain was a revolutionary trait for rice cultivation in China. Because a crop ripened earlier now, there was time in the growing season for another crop to be planted and harvested. Occasionally, one could even get three harvests from this rice in a single year (Technological Advances During the Song, 2025). Farmers were, almost overnight, able to double and even triple their rice output per paddy. It is not difficult to imagine the effect such a boom in food production would have on any country, but especially one as populous as China was even then.

This double cropping method led to many interesting developments, the reverberations of which are still felt in China and around the world. During the Song Dynasty, the capital and court were forced to move from Bianjing in the north (modern-day Kaifeng) to Linan in the south (modern day Hangzhou) (Song Dynasty, 2025). This removal was partly made possible by the rich availability of resources in the southern region of the country, resources including rice. The removal of the court to the south and loss of territory to the Jurchen people of Manchuria laid the groundwork for the Mongols to sweep in and snap up the divided territories, eventually establishing the Yuan Dynasty under the rule Kublai Khan. This is just one such effect made possible by the abundance of rice as an agricultural product.

For a more detailed look at the effects of rice farming on politics, we must look to the end of the Yuan Dynasty and into the Ming dynasty. The first Ming emperor actually began life as a poor peasant who saw the effects of wealth inequality as he and many of his ilk starved due to the policies of the Yuan nobility (Hongwu, n.d.). Eventually, this young peasant, originally named Zhu Chongba, would join one of many popular revolts, distinguish himself, and grow to become the first emperor of the new Ming Dynasty. One of the new emperor's aims was to grant soldiers land to farm in peacetime such that they would not be a burden to the people. Yet again, we see the quest for food and probably rice in particular being a central focus of policy and a driving motive in policy making. The availability of rice now drove a growth in the military class, which allowed the Ming to rule for close to 300 years. It also allowed for naval explorations such as those led by Zheng He in the early 15th century. This explorer traveled up and down the coast, into Southeast Asia, around the Indian subcontinent, and as far as Persia and Africa on his voyages (The Seven Voyages of Zheng He, 2019). This brought China into play on the global stage as a trading partner and source of wealth. The ability to support such endeavors stems first and foremost from the ability to feed the people undergoing them. Without the double cropping of rice, it is arguable that the resources to fund and feed such expeditions might not have developed at all.

For more details about the effects of double cropping, we turn to Science and Civilization in China, a 27 volume series begun in 1954, with the most recent volume being published in 2015. This seminal work is the product of Joseph Needham and his various collaborators (Science and Civilization in China, 2024). Needham wondered why, if the Chinese had developed so many wonderful and wonderous inventions and been so technologically advanced historically, why did they not conquer the world instead of Europe. While the scope of that answer is beyond this article's focus, the works detail immaculately many Chinese achievements in science. It is here we may glean insight into the effects of labor-intensive agricultural systems like double cropping rice.

From this point forward in the article, I will be drawing on knowledge gleaned from the pages of this book, classes taken at the university level and experience living in rice growing regions of the country. Therefore, this section will be much sparser on citations. I encourage anyone who has questions or would like to discuss this subject further with me to do so at any time. With that statement out of the way, let us dive into the sociology of rice cropping.

In the United States, where double cropping rice is not common, it is not unusual for modern machinery to be used in the process. Farm equipment is used to build and maintain the levees that hold the water in the fields, and rice seedlings are also planted with farm machinery. The rice is allowed to grow to a modest foot or two in height before flooding the fields completely to finish out the growing season. Then the rice field is drained, and the rice is harvested again with modern machinery. However, in China, such modern machinery is not typically used. Instead, rice plants are started by hand indoors, then painstakingly transplanted to existing paddies, again by hand. The care and harvesting of the plants are also done by hand. For such an advanced country, it seems incongruous that such work is still done. Yet the use of a permanent rice paddy, the very structure that makes double cropping feasible, also prevents most modern equipment from accessing these flooded, muddy areas. Further, while China has almost always been at the forefront of technology, and certainly has been for the SCA period, its primary resource has always been its people. It has always been a populous country, and the creation of double cropping for rice growth made this even more true. China had huge, sprawling cities even quite early in our period, cities that put quite a lot of Europe to shame. In fact, during the Tang Dynasty, the capital city of Chang'an (modern day Xian) was the largest city in the world (Ancient Xi'anin Tang Dynasty, 2024). These cities swelled with people coming and going, trading goods and selling services, attending to the aristocrats and the imperial court. Bureaucrats and scholarly hopefuls would routinely fill the various capital cities of the empire, hoping for work or jockeying for favor. People, more than anything else, have always been China's most abundant and precious resource.

With so many people and so many hands, labor-intensive processes were not inherently bad, nor in need of replacement. This led to relatively late adoption of agricultural advancements born from the Agricultural and Industrial Revolutions as we know them. And as I have already said, some techniques rather preclude the adoption of many pieces of farm equipment that are used extensively in North American and European agriculture even today. While there are many ways in which China's use of people as its main resource have affected it socially, politically, and geopolitically, it is important to remember, more than any single effect, that its methodology of rice cultivation and its subsequent ability to provide food for such a large population are vitally important to all of those effects.

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Colour Me

Getting Ready for the Hunt!

(Solution to Puzzle on page 19) # SOJOURN By Tobias of Emerickeskepe

F W F J S M J Q H U H Q M G I J H Q D G O Q M

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K V O S D N A T S C Q B E L L W E T H E R G G

Index of Definitions for Puzzle

By Tobias of Emerickeskepe

BELLWETHER - (N.) also *bell-wether*, "lead sheep (on whose neck a bell was hung) of a domesticated flock," mid-14c. (late 13c. in Anglo-Latin; late 12c. as a surname), from bell + wether. The figurative sense of "chief, leader" is attested from mid-14c.

CALABASH - (N.) "dried, hollowed gourd used as a drinking cup," 1650s, *callebass*, from Spanish *calabaza*, possibly from Arabic *qar'a yabisa* "dry gourd," from Per sian *kharabuz*, used of various large melons; or from a pre-Roman Iberian **calapaccia*. As "the fruit of the *calabash* tree" (from which the cups were made) from 1590s.

COMMONS - (N.) mid-14c., "the people collectively," especially "the common people as distinguished from the rulers and nobility and the clergy; the freemen of England as represented in Parliament" (late 14c.), from common (n.). Meaning "the lower house of Parliament, consisting of commoners chosen by the people as their representatives" is from early 15c. *House of Commons* is from 1620s. Meaning "provisions for a community or company" is from mid-14c.

CONEYGARTH - (N.) cony (N.) old use (also coney) a rabbit, or the fur of a rabbit, garth (N.) "small piece of enclosed ground," a northern and western English dialect word, mid-14c., from Old Norse garðr "yard, courtyard, fence," cognate of Old English geard "fenced enclosure," from PIE root *gher- (1) "to grasp, enclose."

COTTAGE - (N.) a small house, usually away from a city or town.

CROFT - (N.) "small piece of enclosed ground for agricultural purposes, a very small farm," especially of those on the western coast and isles of Scotland. Old English croft "enclosed field, small field," of unknown etymology. Germanic and Celtic sources have been proposed.

FALLOW - (N.) c. 1300, from Old English fealh "fallow land," from Proto-Germanic *falgo (source also of Old High German felga "harrow," German Felge "plowed-up fallow land," East Frisian falge "fallow," falgen "to break up ground"), perhaps from a derivation of PIE root *pel- (2) "to fold," hence "to turn." Assimilated since Old English to fallow (adj.), according to OED probably because of the color of plowed earth. Originally "plowed land," then "land plowed but not planted" (1520s). Also used as an adjective, from late 14c.

FARM - (N.) c. 1300, "fixed payment (usually in exchange for taxes collected, etc.), fixed rent," from Old French ferme "a rent, lease" (13c.), from Medieval Latin firma "fixed payment," from Latin firmare "to fix, settle, confirm, strengthen," from firmus "strong; stable," figuratively "constant, trusty" (from suffixed form of PIE root *dher- "to hold firmly, support").

Sense of "tract of leased land" is first recorded early 14c.; that of "cultivated land" (leased or not) is 1520s. A word of confused history, but there is agreement that "the purely agricultural sense is comparatively modern" [Century Dictionary]. There is a set of Old English words that appear to be related in sound and sense; if these, too, are from Latin it would be a very early borrowing. Some books strenuously defend a theory that the Anglo-Saxon words are original (perhaps related to feorh "life").

FIELD - (N.) Old English feld "plain, pasture, open land, cultivated land" (as opposed to woodland), also "a parcel of land marked off and used for pasture or tillage," probably related to Old English folde "earth, land," from Proto-Germanic *felthan "flat land" (Cognates: Old Saxon and Old Frisian feld "field," Old Saxon folda "earth," Middle Dutch velt, Dutch veld Old High German felt, German Feld "field," but not found originally outside West Germanic; Swedish fält, Danish felt are borrowed from German; Finnish pelto "field" is believed to have been adapted from Proto-Germanic).

This is from PIE *pel(e)-tu-, from root *pele- (2) "flat; to spread." The English spelling with -ie- probably is the work of Anglo-French scribes (compare brief, piece).

FORAGE - (V.) to go from place to place searching for things that you can eat or use:

(N.) early 14c. (late 13c. as Anglo-Latin foragium) "food for horses and cattle, fodder," from Old French forrage "fodder; foraging; pillaging, looting" (12c., Modern French fourrage), from fuerre "hay, straw, bed of straw; forage, fodder" (Modern French feurre), from Frankish *fodr "food" or a similar Germanic source, from Proto-Germanic *fodram (source of Old High German fuotar, Old English fodor; (fodder). Meaning "a roving in search of provisions" in English is from late 15c.

FOREST LAW - (N.) : a law (as for the protection of game or preservation of timber) that is peculiarly applicable in a forest especially : one of several laws enacted by William I and other Norman English kings for the protection of the royal forests

FORESTER - (N.) late 13c. (late 12c. as a surname), "officer in charge of a forest," from Old French forestier "forest ranger, forest-dweller" (12c., also, as an adjective, "wild, rough, coarse, unsociable"), from forest (see forest (n.)).

FURISON- (N.) : an iron used to strike fire from a flint —used especially in heraldry.

GREENWOOD - (N.) : a forest that is green with foliage.

HARVEST - (N.) Old English hærfest "autumn," as one of the four seasons, "period between August and November," from Proto-Germanic *harbitas (source also of Old Saxon hervist, Old Frisian and Dutch herfst, German Herbst "autumn," Old Norse haust "harvest"), from PIE root *kerp- "to gather, pluck, harvest."

In Old English and Middle English it was primarily a season name, with only an implied reference to the gathering of crops. The meaning "the time of gathering crops" is attested by mid-13c., and the sense was extended to the action itself and the product of the action (after c. 1300). After c. 1500 these were the main senses and the borrowed autumn and repurposed fall (n.) supplied the season name.

The figurative uses begin by 1530s. As an adjective, from late 14c. Harvest home (1570s) was a festive celebration of the bringing home the last of the harvest; harvest moon (1704) is that which is full within a fortnight of the autumnal equinox.

HERDER - (N.) a person who takes care of a large group of animals of the same type: one that herds specifically : a person who manages, breeds, or tends to livestock.

HEARTH - (N.) Old English heorð "hearth, fireplace, part of a floor on which a fire is made," also in transferred use "house, home, fireside," from Proto-Germanic *hertha- "burning place" (source also of Old Saxon and Old Frisian herth, Middle Dutch hert, Dutch haard, German Herd "floor, ground, fireplace"), from PIE *kerta-, from root *ker- (3) "heat, fire." Hearth-rug is from 1824. Hearth-stone is from early 14c.

HEDGEROW - (N.) a line of different types of bushes and small trees growing very close together, especially between fields or along the sides of roads in the countryside.

HERBAL - (Adj.) relating to or made from herbs: 1610s, from Latin herbalis, from herba "grass, herb" (see herb). Earlier as a noun, "book that names and classifies plants" (1510s): a book about plants especially with reference to their medicinal properties.

HOUND - (N.) Old English hund "dog," from Proto-Germanic *hundaz, from PIE *kwnto-, dental enlargement of root *kwon- "dog." The meaning narrowed 12c. to "dog used for hunting" (compare dog (n.)). Contemptuously, of a man, from late Old English. Germanic cognates include Old Saxon and Old Frisian hund, Old High German hunt, German Hund, Old Norse hundr, Gothic hunds: a type of dog used for hunting: a dog of any of numerous hunting breeds including both scent hounds (such as the bloodhound) and sight hounds (such as the Greyhound).

HUNT - (v, N.) Old English huntian "chase game" (transitive and intransitive), perhaps developed from hunta "hunter," and related to hentan "to seize", from Proto-Germanic *huntojan (source also of Gothic hinþan "to seize, capture," Old High German hunda "booty"), which is of uncertain origin. Not the usual Germanic word for this, which is represented by Dutch jagen, German jagen. General sense of "search diligently" (for anything) is recorded from c. 1200: to chase and try to catch and kill an animal or bird for food, sport, or profit: the act, the practice, or an instance of hunting.

HURDLE - (N.) Old English hyrdel "frame of intertwined twigs used as a temporary barrier," diminutive of hyrd "door," from Proto-Germanic *hurdiz "wickerwork frame, hurdle" (source also of Old Saxon hurth "plaiting, netting," Dutch horde "wickerwork," German Hürde "hurdle, fold, pen;" Old Norse hurð, Gothic haurds "door"), from PIE *krtis (source also of Latin cratis "hurdle, wickerwork," Greek kartalos "a kind of basket," kyrtos "fishing creel"), from root *kert- "to weave, twist together" (source also of Sanskrit krt "to spin"), used as temporary fencing in agriculture.

HURST - (N.) "hillock" (especially a sandy one), also "grove, wooded eminence," from Old English hyrst "hillock, wooded eminence," from Proto-Germanic *hursti-. Common in place names (such as Amherst).

MULE - (N.) "hybrid offspring of donkey and horse," from Old English mul, Old French mul "mule, hinny" (12c., fem. mule), both from Latin mulus (fem. mula) "a mule," from Proto-Italic *musklo-, which is probably (along with Greek myklos "pack-mule," Albanian mushk "mule) a loan-word from a language of Asia Minor: an animal whose mother is a horse and whose father is a donkey, used especially for transporting goods.

OXEN - (N.) plural of ox, it is the only true continuous survival in Modern English of the Old English weak plural (see -en (1)). OED (1989) reports oxes occurs 14c.-16c., "but has not survived.": a domestic bovine mammal (Bos taurus) broadly : a bovine mammal a team of oxen: an adult castrated male domestic ox.

OXYMEL - (N.) a mixture of honey and dilute acetic acid used as an expectorant.

PANAGE - (N.) the act of pasturing swine in a wood or forest (as in medieval England): the legal right or privilege of such pasturing: the charge or payment made for this privilege: food (as acorns, beechnuts) for swine in a forest.

PARCHMENT - (N.) c. 1300, parchemin (c. 1200 as a surname), "the skin of sheep or goats prepared for use as writing material," from Old French parchemin (11c., Old North French parcamin) and directly from Medieval Latin pergamentum, percamentum, from Late Latin pergamena "parchment," a noun use of an adjective (as in pergamena charta, attested in Pliny), from Late Greek pergamenon "of Pergamon," from Pergamon "Pergamum" (modern Bergama), the city in Mysia in Asia Minor where parchment supposedly first was adopted as a substitute for papyrus in 2c. B.C.E.

The form of the word was possibly influenced in Vulgar Latin by Latin parthica (pellis) "Parthian (leather)." The unetymological Middle English -t probably is by influence of words in -ent (compare ancient) and by influence of Medieval Latin collateral form pergamentum: the thin, dried skin of some animals that was used in the past for writing on, or a high-quality paper.

POTAGER - (N.) a cook whose specialties are soup, broth, and bouillon.

TALLOW - (N.) hard animal fat, especially as separated and used to make soap, candles, etc., mid-14c., taloue, talwgh, from a source (perhaps an unrecorded Old English word) cognate with Middle Low German talg "tallow," Middle Dutch talch, from Proto-Germanic *talga-, meaning perhaps originally "firm, compact material" (compare Gothic tulgus "firm, solid"). The English word is implied from late 13c. in surnames (Geoffrey le Talghmongere). Tallow-chandler "one who makes tallow candles" is recorded from c. 1400.

Sources:

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(Excerpts* from) An Old World-Style Herbal for Medieval Scotland

By Neamhain nic Feargus

From the Most Noble and Beloved Bee

Beeswax

Traditionally used for making candles, decorative seals, varnish, and as a base for salves and balms, all of which being suitable for infusion with herbs, especially for their specific spiritual properties.

Honey

Fill a small vial or jar, then light a candle either beside or on it in order to bestow its Virtues, which are thus: attraction, solar charms, and binding any variety of herbs for their charms and remedies.

Hydromel

This is the original form of honey mead, dating back to the Celtic Gallo-Roman Period.

Oxymel

Herb infused apple cider vinegar and honey in equal parts. Allow to set for at least one week. An oxymel of good quality will remain effective for a least a half a year. It is safe even for children.

The Cordial

A cordial is simultaneously both a decoction and a concoction, and traditionally features flavors from fruit (especially sweet berries and stone fruits) and/or flowers (such as elder flowers and rose hips). Selected ingredients should be bland or preferably naturally sweet for cordials. Ingredients that are salty, more spicy than aromatic, too sour, or, worst of all, bitter can counteract the sweetness of cordials and thereby defeat the whole point of making a cordial in the first place. To brew a cordial, boil selected plant ingredients in water with either raw sugar, raw sugar cane juice, or agave nectar until a syrup forms. The proportions should be equal parts plant matter, clean water, and organic sweetener. Thoroughly strain the solids out of the syrup and add those to compost. Pour the pure syrup into a thoroughly cleansed glass bottle or jar, then seal it so that EITHER no air may pass in or out of that container to prevent fermentation OR so that a little air can pass in and out of that container to promote fermentation over the course of a couple months. Non-fermented cordials can be served right away or else allowed to sit in storage for up to a month. Fermented cordials have to be corked and rest for a couple months after completing a couple months of fermentation before being ready to serve or kept in long-term storage. Fermented cordials are suitable for adults but not children. However, non-fermented cordials are perfectly safe for children as long as the child is not allergic to

any of the ingredients, of course. Both non-fermented and fermented versions of cordials are very sweet, which can make medicine seem more palatable for children and adults alike. Examples of medicinal fruit and floral ingredients well suited for cordials include: apple, blackberry, cherry, currant, elder, pear, plum, red mulberry, rose, and strawberry. A blackberry and cherry non-fermented (child safe) cordial is an example of a medieval medicine comparable to modern day cold and flu syrups sold over the counter at the market.

Butter Balms

During the Medieval Period, using butter as the base for salves was much more common than the use of beeswax. Butter balms can be applied externally to sooth Gout (arthritic pain) and muscle soreness when infused with plant juices such as that pf Blackberries, Cherries, and/or Willow bark, as well as serve as an emollient for chapped skin. A decoction of the plant is prepared first, and then this is combined with melted butter. The butter is then allowed to cool and thereby solidify. It can then be applied as a balm as needed in that form.

Herbal Oils and Sea Salt

Sea salt can be applied to the skin as an exfoliant scrub. Either sea salt or Epsom Salts can be dissolved into a bath for soaking sore muscles and joints. There should be no issue with plugging up modern plumbing when draining the bath tub of a salt soak. If an emollient oil, such as that of almond or olive, has been heated and steeped with any of the many skin supporting plants, that oil can then be added to a salt bath or mixed into a salt scrub. Make sure to thoroughly clean any oily residues after the bath tub is drained by using any environmentally safe detergent or else plant bases such as vinegar and lemon.

Milk Baths

Milk was often more trustworthy than water in urban environments during the Medieval Period due to lack of filtration systems and folks generally not being consistently good about boiling water for general use or even simply not allowing blatant pollutants from entering the water in the first place. Dairy maids became known for having radiant skin, promoting the idea of washing with or else soaking in milk. A milk bath can be steeped with honey, which dissolves in the warm milk, and a wide variety of skin supporting herbs. It is more practical to bundle any of those herbs in cheesecloth that is tied off than to toss them into the milk bath freely in order to prevent plugging up modern bath tub drains. While a warm prolonged milk soak can be lovely, it is important to thoroughly rinse of both body and bath tub afterward because milk residues will sour if left to it and become very unappealing.

*You may read this piece in its entirety, including the author's full list of resources used in its development by accessing their Google Drive File

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