Part Three: Interlude for Earthlings

(by the Editor)
Contents

Editor's	s Introduction to Part Three (IB)	142
Editor's	s Commentary & Notes on Translation (IC)	143
Мар С	entral	
1.	Introduction to the Maps, by Chipsa (ICF)	145
2.	The four original sentient peoples of Nye (IDa1)	
3.	The Dark Ages (IDb1)	
4.	Patrick's lifetime: rivers and plains (IDc1)	
5.	Patrick's lifetime: general map (IDd1)	
6.	The entire world: sketches and legend (IE1 & IE2)	
7.	Castra Polara: description and commentary (IF)	
8.	Castra Sarah: description and commentary (IG)	153
9.	Castra Zaisa (IH1 & IH2)	154-155
10.	Pikorro's Castle (IJ1 & IJ2)	156-157
11.	The Royal Castle of Camulodunum (IK1 & IK2)	158-160
Chrono	ology Central	
1.	History of the Land of Nye (IL)	161
2.	The Half Dozen (IM)	162
3.	The Second Magic War (IN)	163
4.	Chipsa's Chronology (IO)	164
Miscell	any Central (poems, skits, sketches, Muskrat family tree)	
1.	Brother Bede's Sonnet (IP)	165
2.	The Three Midwives, by Olaf the White Magician (IQ)	
3.	The Anatomy Club (IR)	
4.	The Muskrats (including a family tree of the Finn clan) (IS1)	169
5.	Black & Blue (a skit) (IT)	170
6.	Typical Cottage and Garden (IU1 & IU2)	172-173
7.		
Nonfic	tion Central (items relating to Planet Earth)	
1.	Brother Bede Chronology (IW)	175
2.	Index of Botanical Names (IX)	176
3.	Aqua Regia Reactions (IY)	182
4.	Study Questions (IZa)	183
5.	Discussion Questions (IZb)	
6.	The Three Charities (IZc)	185

Part 3: IA 141

Editor's Introduction to Part Three

"Let's have a central place for all of the maps, chronologies, and miscellany," said Chipsa one afternoon when we were talking.

"But," I replied, "readers will need to have maps and chronologies close to the text so they can follow the action."

"That's simple," countered Chipsa, "we'll put the maps in BOTH places. Why spoil the ship for a ha'p'worth of tar?"

"Okay, smart one," I said, "tell me what a ha'p'worth of tar is."

She smirked and said, "A halfpenny worth of tar — a small bucket. Tar is used to seal joints and treat rope on a wooden ship. It's a great waterproofer."

"How do you know so much about Planet Earth?" I asked.

"A lifetime of study," was the rejoinder. "I am worried about Earth. I wish there were something I could do to help."

"You have already done more than your share," I assured her. "Thank you for your letters and diaries."

The End

Part 3: IB 142

Editor's Commentary & Notes on Translation

Since the people of Nye originally came from fourteenth-century England, they should be speaking Middle English. The translation to modern English and the approximate translation of many words unique to the Land of Nye were accomplished through Polara's magic.

In Nye, people use a word that translates as "okay" but they don't have "weekends." The months of the year are the same as ours, but they say "the second hour of the day" instead of "nine o'clock." The word "minute" is used like "moment" — not as a specific measurement of time. "Secondary school" takes the place of "high school" and "midday meal" is a frequent alternate to "lunch." Other than that, the language is typical of an Anglophile & Francophile medievalist American born in 1953 CE (the Editor & Translator). Chipsa has her own style of gentleness, optimism, courage, and decision-making-by-consensus.

When I say that the Knights of the Realm were trained in "martial arts", that is just a rough translation of something invented by the people of Nye themselves. These citizens of an agrarian utopia needed a way for a lightly-armed knight to arrest an armed perpetrator, and, given the absence of gunpowder and crossbows, they did pretty well. When human beings first arrived in Nye, Brother Bede persuaded the three barons to destroy all the cross-bows. The barons felt that cross-bows were the perfect weapons for treason and mutiny, so Brother Bede won his point. Brother Bede also succeeded in his ban on cock-fighting and dog-fighting. He was pleased to find that many of the vices of the Other World had been forgotten in the magic transplantation of humans to the Land of Nye.

When members of the Anatomy Club speak of "an age of scientific discovery" they refer to concepts developed on their own apart from the knowledge of 14th-century England.

At the time of arrival from England, the people brought with them knowledge of how to build and operate sailing vessels. Not all the sailing lore of Earth came with them, however. The sailing boats of Nye are limited to sloops, catboats, and a few other designs. This small world does not need large vessels. As mentioned elsewhere, this flat world is governed by magic rather than natural laws. In order to do navigation or weather-forecasting one must learn White Magic or Black Magic. Flatboats, keelboats, rowboats, and canoes are common and the Boatbuilders' Guilds are held in high esteem. Young people are encouraged to compete for the coveted position of "Boatbuilder's Apprentice."

The Editor lives in the Other World, Planet Earth. From 1999 to 2002 the Editor and his wife lived next door to a genuine (non-talking) North American muskrat *Ondatra zibethicus*. A stream called "Wharton Brook" flowed through our property, and the muskrat lived in our portion of the brook. He or she was

Part 3: IC 143

industrious and we often saw it swimming with plant material in its mouth. This particular muskrat had no mate and we saw no litters of young. When the Count of the Western Marches came to the Land of Nye from the Mohawk River Valley, he brought with him many legends and myths about the muskrats of his homeland.

For the Six Nations of the Haudenosaunee Confederacy, the Editor uses the more common name "Iroquois." The meaning in English is "people of the longhouse." Prior to the acceptance of the Tuscarora in 1722, there were only Five Nations.

For a world as small as the Land of Nye, the gene pools for the various living creatures would be much too small to be viable. The gene pools are also maintained by Polara's magic. The acreage available for food and forage crops is small relative to the population, so the human inhabitants rely heavily on fish, shellfish, and seaweed from the surrounding ocean. This agrarian utopia is not "sustainable" in the sense that if Polara and the other High Magicians ceased to love it, it would cease to exist.

End of Editor's Commentary

Part 3: IC 144

Introduction to the Maps by Chipsa

When my son Alnus was awarded his first sabbatical from the Bearsgard Academy, he was very excited.

He invited me to come to Bearsgard and we spent four days in the Map Library of the Academy. I wanted to draw some maps for my *History of the Second Magic War* and the help from Alnus was key to completing that task. We looked over many maps new and old, and he helped me to simplify and prioritize my own maps. Not all the locations were equally relevant to my tale.

The maps that had been drawn by Black Magicians had occult symbols in the margins. Creepy.

The original map of the "Royal Castle of Camulodunum" was old and very fragile. Alnus was one of the few people permitted to handle it. The map was in the Brown Wizard's knapsack during the evacuation of Camulodunum and it got dunked in the salt water at least three times when the wizard jumped in to rescue people.

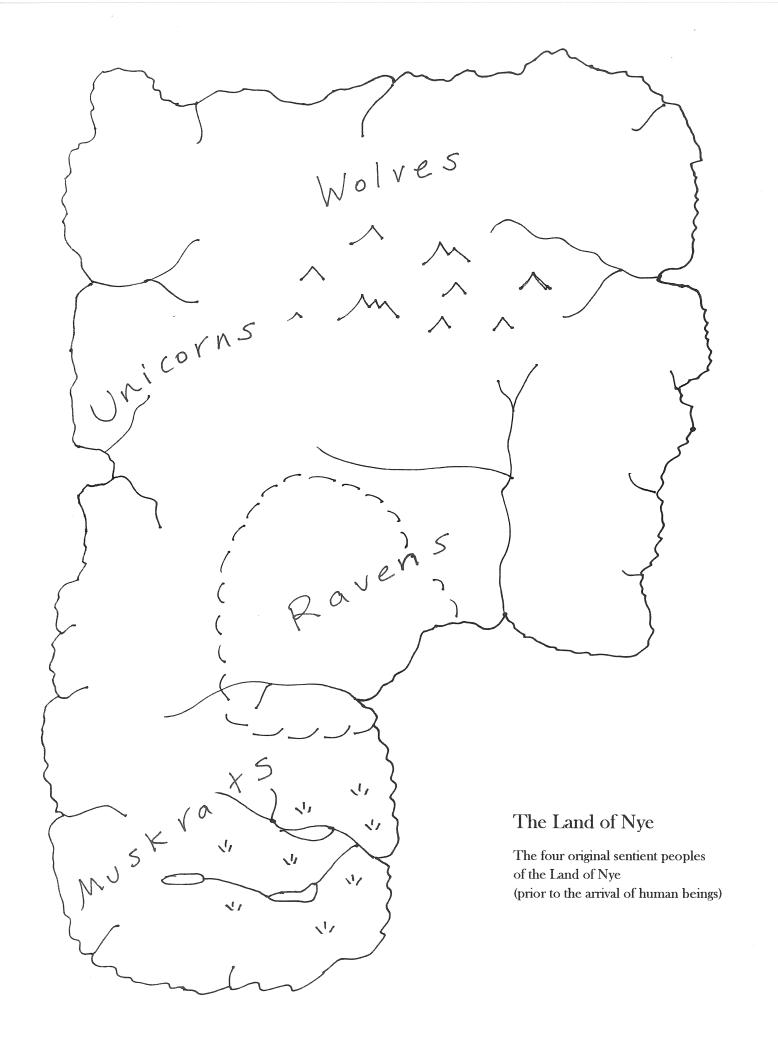
I was able to draw the "Sketches of the Entire World of Nye" with help from a White Magic spell that I learned from Tilia Finn.

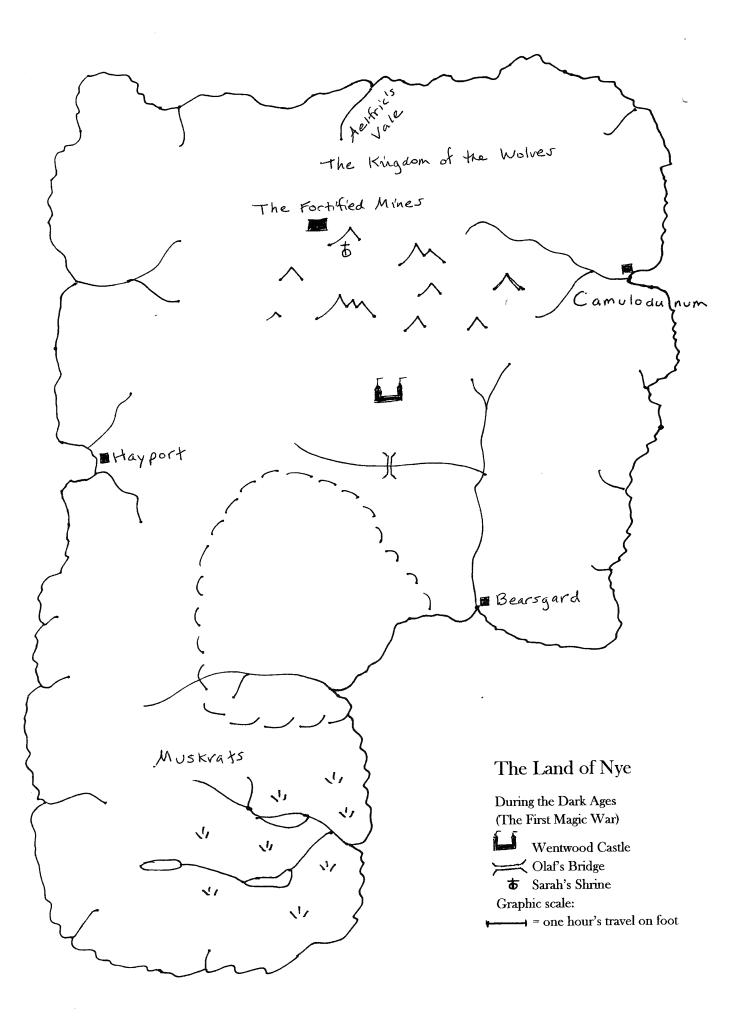
On the first day of our research, one of the Green Wizard's volunteers in the Scriptorium came over to assist. He taught me how to use graphic scales and in return I told him how to remove the ink stains from his hands. In my graphic scales, I show a line and say "this equals one hour's travel on foot." If I said "one half inch equals three miles," then I would have to re-write the scale every time the map was enlarged or reduced.

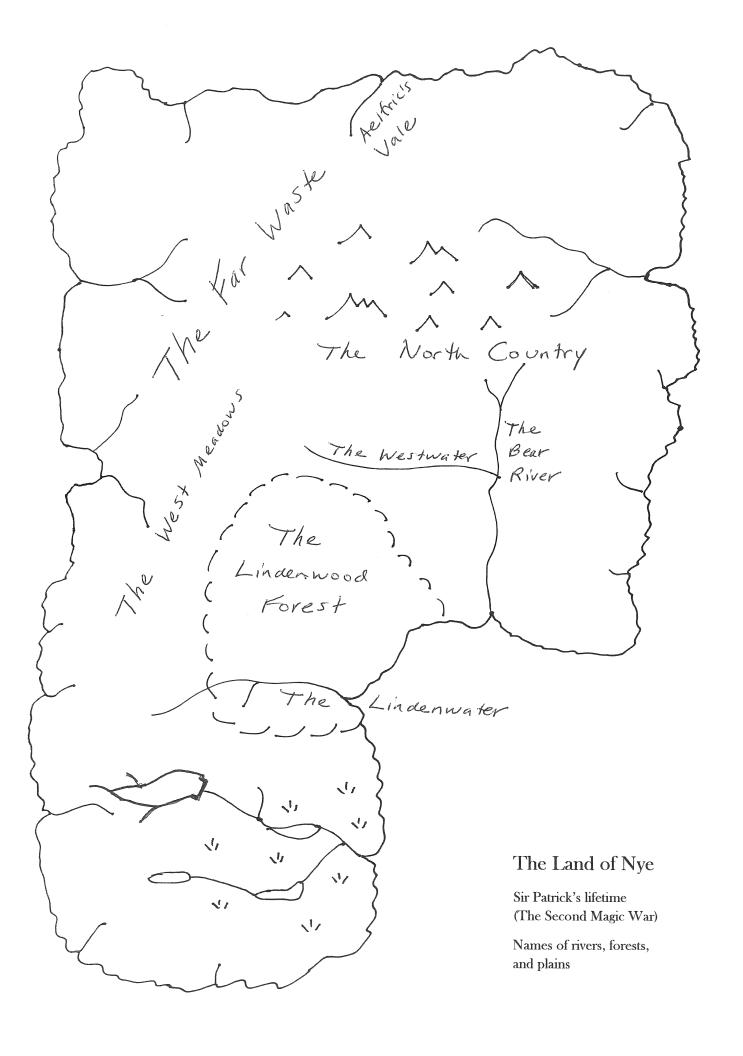
The volunteer pointed to a remote mountain where his grandfather had fallen out of a tree and broken his leg. His grandfather, a well-known botanist, was climbing a tall tree to get seeds of a rare conifer. Fortunately, there was a Raven with him who was able to go get help. That was the beginning of the "North Country Raven Safety Patrol." The Raven Walt began his career as a Junior Communications Officer at the Patrol's headquarters in a cabin behind *The Wandering Bullfrog*.

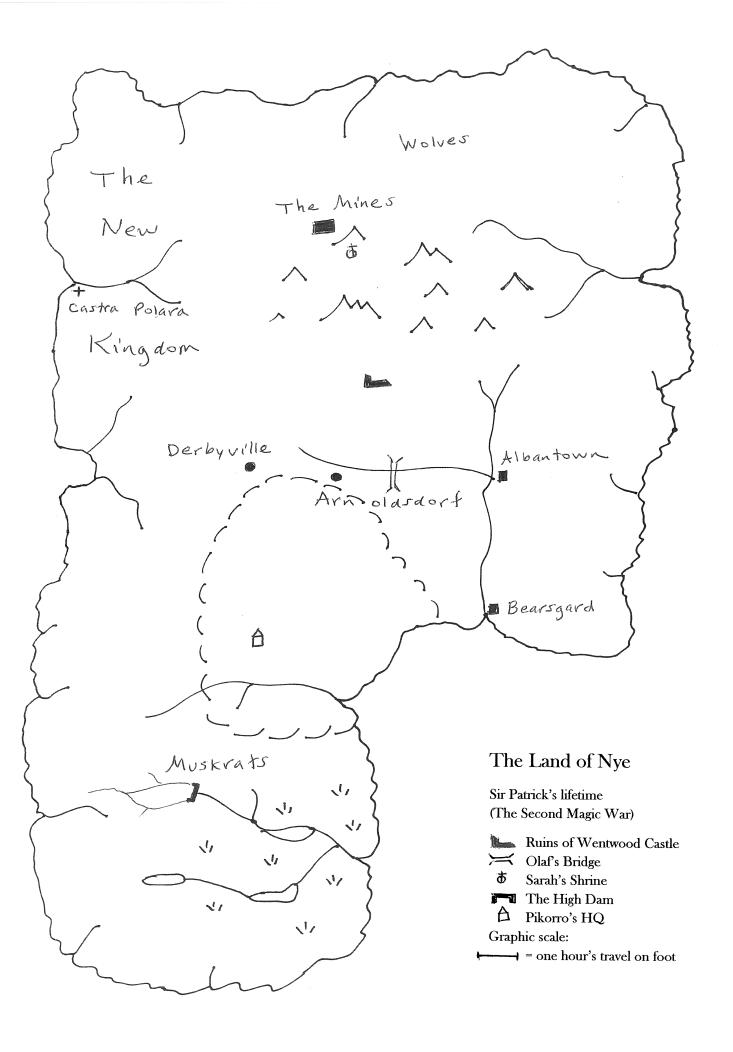
End of Introduction

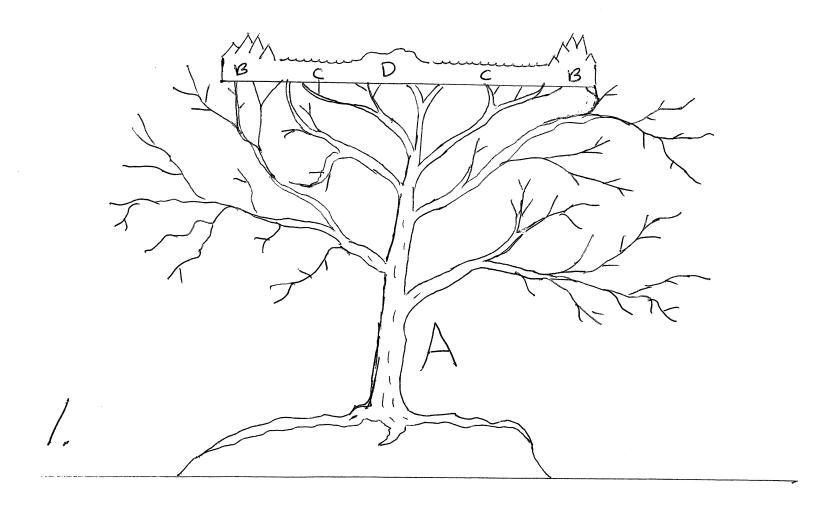
Part 3: ICF 145

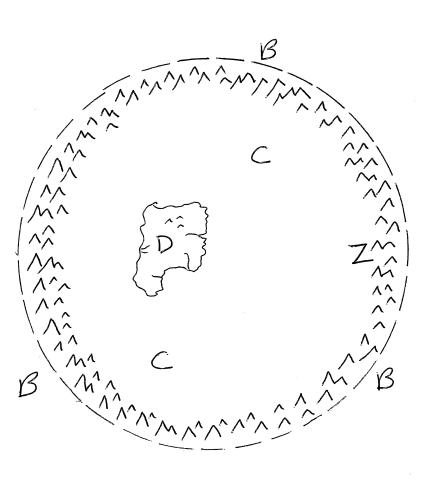












2.

Sketches of the entire world of Nye Legend & Commentary

- 1. The entire world section view
- 2. The entire world plan view (from above)
- A. Thor's Oak: the giant oak tree that holds up the world
- B. The Ring Mountains that encircle the world and keep the ocean from flowing over the edge
- C. The ocean
- D. The land: the only continent in Nye (although Brother Bede would call it just an island)
- Z. Castra Zaisa (colony in the Ring Mountains)

The climate and astronomy of Nye are governed entirely by magic without the action of a single natural law of any kind. The conditions on Nye mimic certain temperate regions of Planet Earth for arbitrary magical reasons.

Also, the magical creatures of Nye – the Unicorns, the Wolves, the Ravens, and the Muskrats – are able to survive with minimal intake of food. This is due to magic. If you make use of the rudimentary graphic scales provided on the maps and calculate the acreage on which these creatures live, it would seem impossible for them to have sufficient food supply. The Muskrats live on water lilies, cattails, twigs, and branches. The smaller muskrats on Planet Earth will sometimes eat freshwater mussels or small frogs, but the magical Muskrats are strict herbivores. Coupled with the extraordinary lifespans of the magical creatures is a very low birth rate.

The human population of Nye has normal human appetites and the people have to be careful about sources of food. They rely heavily on fish, seafood, and seaweed, and many of them are vegetarians. As mentioned elsewhere, population is voluntarily limited – there is a general consensus on this topic (with the exception, of course, of the Black Magicians who have their own views on this issue).

Part 3: IE2 151

Castra Polara Description and Commentary

The population of the New Realm, also called Castra Polara, is about two thousand people. Volunteers are recruited to take turns serving as charcoal-burners, herbgatherers, boat-builders and maple syrup makers in the forests of the North Country. When the New Realm was first founded the citizens made a series of decisions through the Great Referendum. They decided to follow a "para-vegan" diet of plantbased foods, shellfish, and small amounts of dairy products imported from Bearsgard. It was further decided that domestication of animals was not sufficiently respectful of animal rights, so the people opted to do without domestic animals. They voted to replace oxcart transportation with human-powered transport by volunteer "waggoneers." The plan included extending the three years of voluntary service to five years to accommodate the increased need. Dedicated waggoneers have a chance to demonstrate their strength at the various festivals. Much of the heavy transport is done by flatboats on the navigable parts of the rivers, and sailing ships trade with Bearsgard. Their fabrics are mostly made of linen and hemp, with some wool and leather imported from Bearsgard. The homes and buildings are built of stone. (Editor's note: the map was extremely dull, so I decided to use the legend without the map. You can imagine the map from the text below. Compare to Castra Zaisa.)

- A. The city. There are small docks for flatboats on the river.
- B. The docks for trade with Bearsgard.
- C. The market, fairgrounds, and athletic fields.
- D. The crafts district.
- E. Fields for grains.
- F. Orchards for tree fruits and nuts.
- G. Fields for vegetables, greens, root crops, melons, herbs, and berries.
- H. Fields for flax for making linen cloth.
- I. Smithies (near where charcoal and iron arrive from the North Country).
- J. Two grist mills along the river.
- K. Spinners and weavers near the flax fields.
- L. Limestone guarry, marble guarry, and lime kilns (near the river).
- M. Sandstone quarry (near the river).
- N. Shellfish beds and cranberry bogs (on the coast to the north of the city).
- P. Swimming beach and lifeguard training school.
- Q. The Royal Palace, public ornamental gardens, and royal woodland.
- R. The City Hall and Hall of Records.
- S. The Mayor's Residence.
- T. The road to Castra Sarah (the road to the Mines splits off northward).
- U. The road to the West Meadows, Derbyville, and Bearsgard.
- V. The Hospital, with grounds adjoining the public gardens and the Royal Palace.

Part 3: IF 152

Castra Sarah description

(as it appeared at the time of the Great Balloon Race, 661 APC)

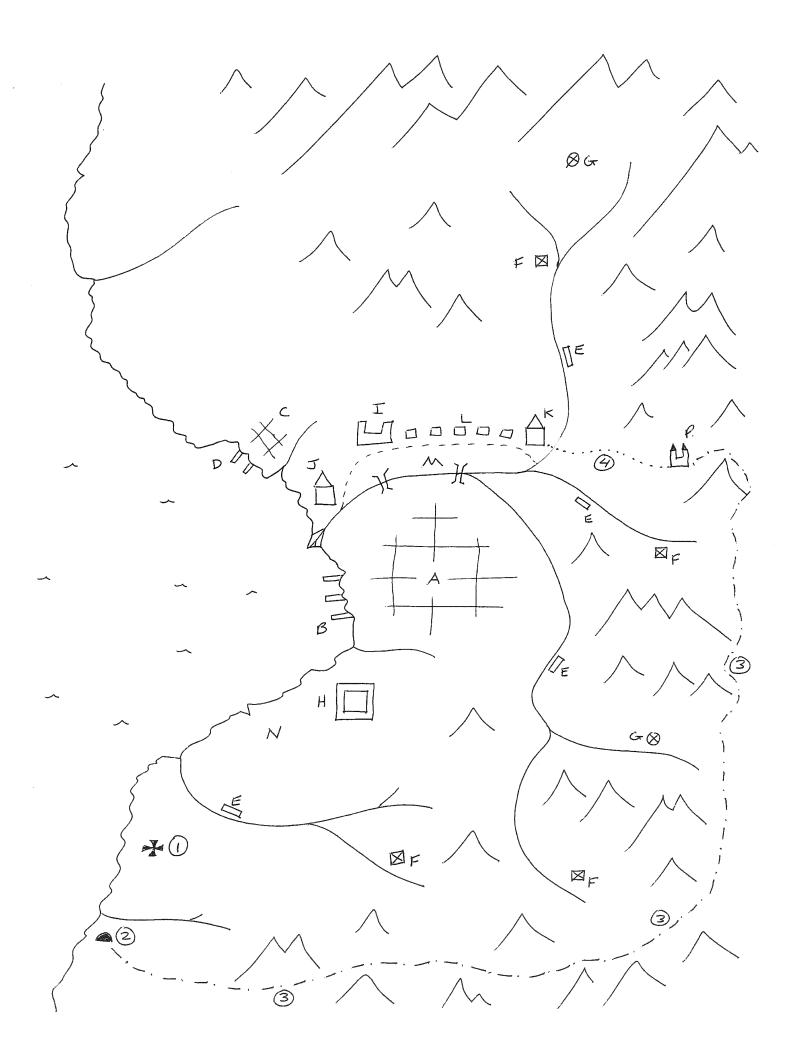
- A. The three original hunting lodges, built before the Dark Ages.
- B. The path to the lake, the source of water for the lodges.
- C. Secret tunnel from the Fortified Mines, begun when Olaf was born.
- D. Stone tomb of Queen Sarah, which started the idea of a wall.
- E. The original stone wall built at the end of the Dark Ages.
- F. Three gates: entrance gate, firewood gate, side gate to the lake.
- G. The two royal lodges and their royal guest-houses (625 APC).
- H. Additional stone walls (627 APC).
- I. The Summer Kitchen, vegetable and herb gardens (630 APC).
- J. Athletic field for lacrosse and other games (632 APC).
- K. The hilltop gazebo for the Peace Academy classes (635 APC).
- L. Orchards for apples, pears, and hazelnuts (638 APC).

The three original hunting lodges, built about 220 APC, were always kept stocked with hunting and fishing equipment and quarrying tools. The lodges had rustic camping amenities and simple kitchens. When the secret tunnel was begun in 298 APC, the lodges were then kept supplied with a rotating stock of flour, oats, chestnuts, and hazelnuts, and brick baking ovens were added. When the miners used the lodges as a refuge for two years at the end of the Dark Ages, they relied on hunting, trapping, and fishing for most of their food. They also gathered nuts, herbs, and berries during the appropriate seasons. The supply of flour, oats, and nuts was starting to run low when the Dark Ages ended.

The modern additions to Castra Sarah began in the year 625 APC, twenty years after the end of the Second Magic War and the founding of the New Realm. At that time, it became a summer retreat for the two royal families and the faculty of the Peace Academy. A swimming dock was added to the lake. The new visitors to Castra Sarah wanted less fish and game and more vegetarian food, so some of the forest was cleared to make space for gardens and orchards. An athletic field was also added, by popular demand of the young people. Nearby is the Council Fire Glen, where the Count of the Western Marches tells stories to an audience gathered around a fire. The young people love his ghost stories.

This is another case where I decided to use the legend without the map – the Editor.

Part 3: IG 153



Castra Zaisa map Legend and Commentary, 661 APC

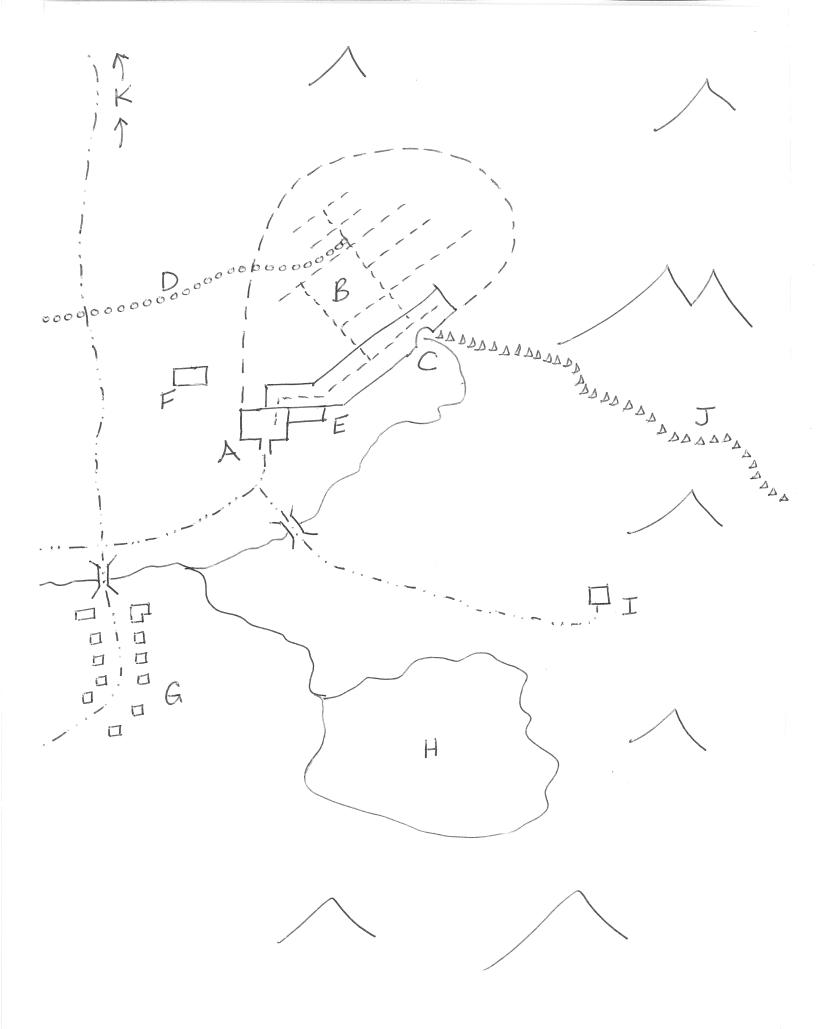
Castra Zaisa is the colony founded by Pikorro and Kalko in the foothills of the Ring Mountains that surround the flat world of the Land of Nye. This small colony is due east of Bearsgard (most of the Ring Mountains are not suitable for settlement). This map shows the economy of Castra Zaisa: the four large sawmills, the four camps for hunting and lumbering, the fishing village, and the two iron mines. Agricultural products such as flour, apples, linen, and wool are purchased from Bearsgard. The hunters and trappers provide meat, furs, and leather. There are no domestic animals in Castra Zaisa except for dogs (lots of dogs). Riverboats take the place of oxcarts. Castra Zaisa uses keelboats for fast rivers and Albantown and Castra Polara use flatboats for slow rivers. The esplanade along the riverbank was designed by Pikorro and contains statues of famous Black Magicians. Under the foundation of Pikorro's Castle there is a small gold mine — that was the reason for building the castle in that location. Castra Zaisa is quite wealthy and does not exhibit the gentle humility of the other two human kingdoms. The events shown here are from the year 661 APC, the year of the Great Balloon Race from Bearsgard to Castra Zaisa.

- A. The town. There are small docks for riverboats not shown.
- B. The docks for trade with Bearsgard.
- C. The fishing village.
- D. The docks for fishing boats.
- E. Four large sawmills (water-powered). Lumber is exported to Bearsgard.
- F. Four moveable camps for hunters and lumberjacks (upstream from sawmills).
- G. The mines for iron and copper (metals are also exported to Bearsgard).
- H. Fort Kalko and housing for soldiers (partially built).
- The foundations of the Guildhall (under construction).
 This will be the seat of the Burgesses who govern Castra Zaisa.
- J. Embassy shared by the two human kingdoms, the Muskrats, and the Ravens.
- K. Embassy for the Wolves.
- L. Stately homes built for the Burgesses (some under construction).
- M. Esplanade along the riverbank, with parks and ornamental gardens.
- N. Military training ground for Fort Kalko.
- P. Pikorro's castle and dungeons.

Locations related to the rescue of Chipsa in the year 661 APC.

- 1. Landing spot for the Great Balloon Race.
- 2. Cave where the rescuers hid.
- Route taken by the rescuers to Pikorro's Castle.
- 4. Secret tunnel connecting the Embassy of the Wolves with Pikorro's mine.

Part 3: IH2 155



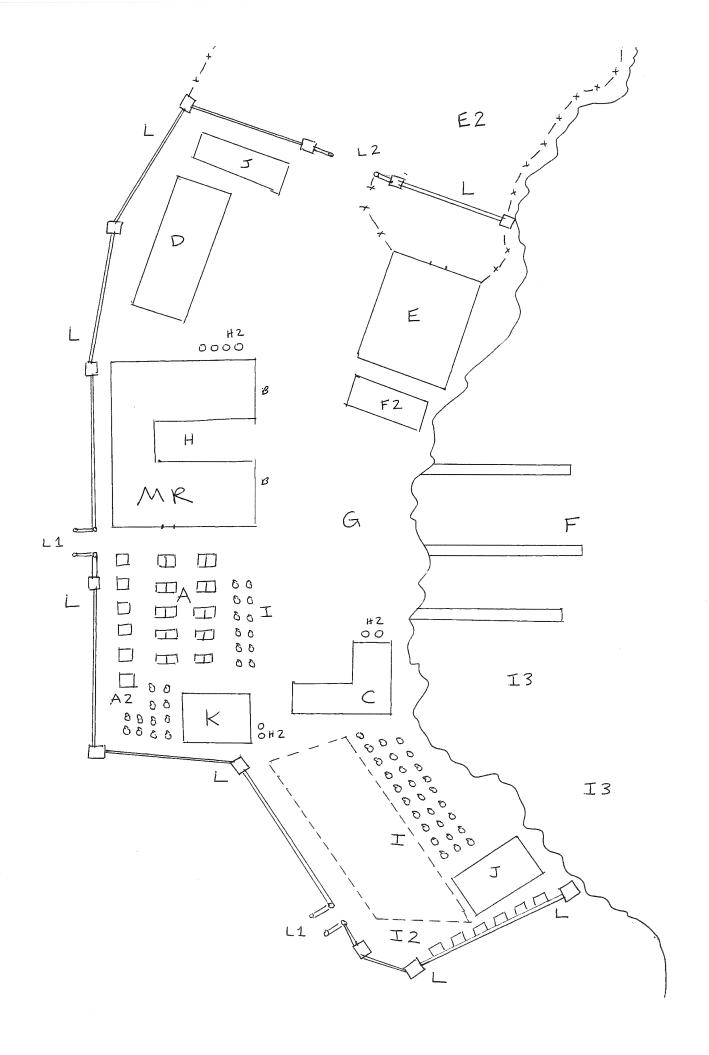
Pikorro's Castle Legend & Commentary, 661 APC

- A. The Castle with the main gate facing south (dungeons on lower level).
- B. Gold Mine connected with the basement of the Castle.
- C. The stone culvert where the stream flows out of the Gold Mine.
- D. Secret tunnel from the Embassy of the Wolves to the Gold Mine.
- E. Barracks for the soldiers.
- F. Kennels for Pikorro's dogs.
- G. The village where the miners live.
- H. Fish pond.
- I. Gamekeeper's cottage.
- J. The route taken by the rescue party.
- K. Road to the dog-racing track.

At the time of Chipsa's imprisonment, Pikorro is the wealthiest person in the Land of Nye. When Pikorro and Kalko were sentenced to hard labor, the Kingdom of Men recommended that their property be confiscated. The Burgesses did not comply. Kalko had no children, so he left his share of the colony to Pikorro. Besides owning the Castle and the Gold Mine, Pikorro is also landlord for 80 households in the town (he sold 120 houses when he built the Castle). The Castle is built of logs chinked with mortar (to us it would look like a small fort on the 19th-century U. S. frontier). In addition, Pikorro is the owner and exclusive bookmaker for the dog-racing track. There is fierce competition between the three main kennels: Pikorro has one, the Burgesses have another, and there is a third one at Fort Kalko. Occasionally a hunter or lumberjack will use his savings to buy a racing dog and challenge the established teams.

When the Burgesses discovered that Pikorro had held Chipsa prisoner, they changed their minds and confiscated Pikorro's properties after all. His lands and wealth were added to the holdings of the government of Castra Zaisa.

Part 3: IJ2 157



The Royal Castle of Camulodunum Legend and Commentary, 297 APC

The Main Residence (MR) with windows on all sides. Brother Bede felt that windows were important for light and ventilation. He had some documents on making window glass for cathedrals, and with help from his Uncle William and two blacksmiths he adapted the methods for residential use.

Basement Level: storage and armories.

Ground Level: winter kitchen, sculleries, butteries, laundries, dining hall, audience chamber.

Second Level: servants' quarters.

Third Level: unmarried soldiers and sailors — living quarters.

Fourth Level: unmarried journeymen craftsmen — living quarters.

Fifth Level: the royal family and the royal council chamber (there is a spiral stair from

council chamber to the look-out tower on the roof of the castle).

Sixth Level: Sisters of the Green Leaf — living quarters.

Seventh Level: Infirmary with roof garden and look-out tower above.

- A. Two-story cottages for officers and master craftsmen (A2 = Brown Wizard's house). Some of the journeymen and junior officers live as lodgers in the cottages. Everyone takes turns working in the gardens and orchards. Half of the firewood comes from the Fortified Mines which are surrounded by forest on all sides.
- B. Roses growing on trellises on the east-facing façade (cut for decoration of the interior).
- C. Work Building with schoolrooms and nursery on the ground floor. Second and third levels have workshops for spinning, weaving, carpentry, and crafts.
- D. Outer Work Building: smithies, pottery kilns, royal mint, soap-making, and candle-making. Storage for firewood and charcoal. The forest of the North Country is nearby.
- E. Wagon House and oxen stables with hayloft above (E2 pasture for the oxen).
- F. Docks for the Royal Sloops-of-War and F2 storage for sails and ropes.
- G. Parade Ground that also serves as an athletic field for school children and a work area for drying and mending sails.
- H. Outdoor kitchen, laundry area, and work area. H2 = water wells.
- I. Gardens and orchards. I2 = garden sheds and chicken coops. I3 = shellfish beds.
- J. Ice-houses with ice packed in sawdust and straw.
- K. Roman-style baths heated with wood.
- L. Perimeter wall for defense of the castle and grounds. L1 = gates. L2 = oxcart gate.

Part 3: IK2 159

The Economic Geography of Camulodunum (legend part 2)

The twelve castles are connected with each other via underground tunnels. When Camulodunum fell to the Black Magicians in 339 APC, the people were able to evacuate to the three harbors through the tunnels.

Each castle has certain specialties — one of them has a shipyard for making sloops and boats and another makes wagons, barrels, and buckets. There are some functions in the surrounding country outside the twelve castles: 1) stone quarries and lime-kilns, 2) charcoal-burners' cabins, 3) maple syrup sheds, and 4) a large sawmill. The people operating these facilities come back to the castles in times of danger. Also outside the castles are a) a pleasure garden with a gazebo and a pond, b) a swimming beach, c) archery ranges, and d) fairgounds. Camulodunum has better access to forests and forestry products than Hayport does.

The Fortified Mines are located to the northwest in the mountains of the North Country. The mines are a spider network of tunnels in all directions: the western tunnels are for iron ore and the eastern tunnels for gold, silver, and copper. Above the mines, where the miners have their village, there are earthworks manned by soldiers for defense against Wolf attacks. The miners also cut firewood to send to the castles of Camulodunum. During the winter, the miners and smelters come back to the castles.

Imports from Hayport: wool, flax, leather, chestnuts, hazelnuts, wheat flour, rye flour, oats, barley, hops, hay, straw, salt pork, summer sausage, cheese, butter, pickles, jams, dried fruit, dried herbs, and salt.

Exports to Hayport: metals (ingots and metal tools), arms and armor, bows and arrows, sloops and boats, barrels, wood furniture, metal kitchenware, glass, charcoal, lumber, and maple syrup.

End

Part 3: IK2 160

Chronology of the History of Nye

APC = After Plague Cusp

CE = Common Era or Anno Domini (in the Other World, Planet Earth)

- 0 APC or 1390 CE: The Plague Cusp: the coming of humans to the Land of Nye and the founding of the Sisters of the Green Leaf.
- 1-297 APC: The building of the twelve castles of Camulodunum and the development of the town of Hayport with its farms, meadows, and orchards.
- 235 APC or 1625 CE: The coming of the Count of the Western Marches to Nye.
- 297 APC: The birth of Olaf, followed two years later by the birth of his brother Ingmar.
- 301 APC: The death of King Aelfric, the Lost King.
- 321 APC: The beginning of the Dark Ages (the First Magic War). The founding of Bearsgard.
- 339 APC: The Fall of Camulodunum, followed by the death of Rhus the Necromancer and the death of Queen Sarah (340 APC).
- 341 APC: The Fall of Hayport, the death of Ingmar, the founding of the Kingdom of Men, the founding of the Order of Wizards, the founding of the Knights of the Realm, the founding of the Cudgelwielders, the death of Olaf, the recapture of the Mines, the end of the First Magic War (and the end of the Dark Ages). Derbyville, Arnoldsdorf, and Albantown are founded at this time.
- 342 APC: The Special Meeting of the Sisters of the Green Leaf, and the founding of the Bearsgard Academy with its Almshouse and Scriptorium.
- 342-605 APC: The time of peace, called "Sarah's Peace."
- 539 APC or 1929 CE: The birth of the Grey Witch.
- 559 APC: The birth of Orontius, followed two years later by the birth of his brother Elhanon.
- 582 APC: The completion of the High Dam and the birth of Pikorro.
- 589 APC: The birth of Chipsa, Patrick, Taspel, and Roswitha.
- 592 APC: The death of Philomena Finn, the death of Orontius, and the founding of the Council of Finns and Friends. The orphan boy, age unknown, is adopted by Darian.
- 605 APC: The action begins! The beginning of *Sir Patrick and the Blue Wizard* followed immediately by *The Quest of the Ten Coins*.

End

Part 3: IL 161

The Half Dozen

- 562-564 APC: Birth of Darian, Elena, Damrod, Maia, Chistar, and Linnea in Derbyville.

 They grow up as childhood friends.
- 581 APC: They perform their first year of voluntary service working on the High Dam in the Land of the Talking Muskrats and attend the dedication ceremony in the year 582.
- 582-586 APC: The second and third years of their voluntary service are spent at the Almshouse of the Bearsgard Academy. They take charge of the recreation activities and are known affectionately as "The Half Dozen." They subsequently enroll in the Bearsgard Academy for two-year degree programs. In the land of Nye, primary and secondary education are excellent, and the need for higher education is limited to certain complex subjects. These two-year degrees are equivalent to what we would call a master's degree. Most of the skills needed for the appropriate technology of this world are best taught by hands-on apprenticeships, of which there are many. In this world, academic skills are not stratified by class. An agricultural laborer may also be an historian, and a blacksmith's apprentice may also be a poet. Advanced studies are customized to the individual. This world of only ten thousand people has a successful economy and can afford to be generous and flexible.
- 586 APC: They complete their studies at the Bearsgard Academy. Maia becomes an apprentice of the Sisters of the Green Leaf and the other five begin their professions. At this time Darian becomes the Chief Cudgelwielder, and Elena, Linnea, and Maia become the first female Cudgelwielders.
- 588 APC: The triple wedding is performed by the Mayor of Derbyville and the Green Wizard's apprentice (the latter a brother of Damrod). The three couples are: Darian & Elena (parents of Patrick), Maia & Damrod (parents of Roswitha), and Linnea & Chistar (parents of Chipsa).
- 589 APC: Birth of Chipsa, Patrick, and Roswitha. Elena dies when Patrick is born. Years later, after the Second Magic War is over, Chipsa discovers that the cause of her death was Black Magic. The Land of Nye has excellent midwives and death from childbirth is rare. Taspel is also born in the same year. In later years, the year 589 becomes known as the beginning of the Polara Cusp. The story of the cause of Elena's death is told in *The Tale of Baron Kannol* (which is included in *Polara's Peace: Part Four of the Letters and Diaries of Queen Chipsa*).

Part 3: IM 162

Chronology of the Second Magic War Year 605 After Plague Cusp (1995 AD or CE)

Week	Date	The War	The Quest
1	Sept 13	Chipsa & the mob	
	Sept 14	Conversation at the shrine	
2	Sept 21	Festival: grand outdoor feast	
	Sept 22	Koshter at the campfire	
	Sept 23	Ambush of the spears	Meeting on the Far Waste
3	Sept 26	Castle repaired, Armories open	SP & BW captured
	Sept 27	Defection of the boarhounds	Roswitha captured
	Sept 28		Escape from Pikorro's HQ
	Sept 30		Meet Raj the Sailor
	Oct 2		Muskrat Parliament
4	Oct 7		They sail north
5	Oct 12		Arrive at Castra Sarah
6			
7	Nov 1	Essay published	
8	Nov 4	Chistar captured	

Week	Date	The War	The Quest
9			
10	Nov 22	Essay arrives at the Castle	
11	Nov 24	Chistar's speech	
	Nov 25	White Flag Delegation	
	Nov 29	Treaty language finalized	
	Nov 30	Treaty goes to Scriptorium	
12	Dec 5	Ratification votes begin	
13			
14	Dec 14	Walt & Alf go north	Blue Wizard falls
	Dec 15	_	Meeting at Castra Sarah
	Dec 16	Walt goes to Bearsgard	
	Dec 18		Meeting with the Wolves
15	Dec 20	Alf goes to Bearsgard	
	Dec 21	Alf & Polara with King & Queen	
	Dec 26	Ratification votes concluded	
16	Dec 28	Pikorro & Kalko depart	
	Dec 31	Signing Ceremony for Treaty	

Part 3: IN 163

I wrote this chronology on my 75th birthday — Chipsa.

- 605 APC: End of the Second Magic War and final ratification of the Treaty of Olaf's Bridge.

 Polara cancels the Journey of Testing and summons us home.
- 606 APC: Founding of the New Kingdom, also called Castra Polara, and founding of the colony in the Ring Mountains, named Castra Zaisa.
- 607 to 614 APC: Taspel and I spend our three years of voluntary service building roads in the New Kingdom, and spend four years at the Bearsgard Academy studying Philosophy, Science, Engineering, Music, Culinary Arts, and Gymnastics.
- 614 APC: Taspel and I are married and become King and Queen of the New Kingdom.
- 615 APC: Birth of our son Alnus.
- 617 APC: Birth of our son Carpinus.
- 620 APC: Birth of our daughter Ostrya.
- 625 APC: The twentieth anniversary of the Treaty of Olaf's Bridge. Pikorro and Kalko are convicted of trying to kill Sir Patrick and sentenced to hard labor.
- 628 APC: Sir Patrick (age 39) and Sir Lionel invent the sport of Albantown Wrestling.
- 639 APC: Kalko dies in the Bearsgard Lock-Up at age 78.
- 644 APC: Elhanon dies in the Kingdom of the Wolves at age 83.
- 647 APC: Death of Krizzen, formerly King of the Second Black Magic Kingdom.
- 648 APC: Death of Polara on the winter solstice at age 110.
- 649 APC: My 60th birthday and the beginning of my diary.
- 651 APC: The coming of elk to the Land of Nye, courtesy of Polara's magic. Pikorro is released from hard labor and returns to Castra Zaisa (at age 69).
- 655 APC: My daughter Ostrya gives a speech to the Council of Five Mayors. I start writing my *History of the Second Magic War* (published by the Scriptorium in 658).
- 657 APC: At the end of December, I hear the last words of Queen Zaisa (age 99).
- 658 APC: I sail to Castra Zaisa to negotiate with Pikorro and am held captive for three years.
- 661 APC or 2051 AD or CE: I am rescued from Castra Zaisa by the Muskrat and High Magician Tilia Finn (age 68), the Good Raven Lisa (also age 68), and two of my grandchildren: Sir Alpheus, age 16, son of Alnus, and Betula, age 14, daughter of Carpinus. Note that the good ravens, the Muskrats, the Land of Humans, and Castra Polara share an Embassy in Castra Zaisa.

Part 3: IO 164

Brother Bede's Sonnet

O happy world! Bid sorrow last adieu!

Forsake thy cares! Forget thy former strife!

Take root in this fair land so bright and new —

Begin afresh an unencumbered life.

Each blade of grass, each sacred drop of rain,

Each root and twig, each songbird's merry trill,

Bids us "Be well – forget thy life of pain —

Take up the cup of joy and drink thy fill."

We'll put our hands to work with spade and plow

And gently till the rich and fertile land —

We'll pluck the full-grown apple from the bough

And tend the many gardens close at hand.

Let toil and virtue ever be our guide — With goddess Peace forever at our side!

Part 3: IP 165

The Three Midwives by Olaf the White Magician

Queen Lavinia gave this poem to Achillea, President of the Sisters of the Green Leaf, on the occasion of the founding of the Bearsgard Academy.

Prologue by Olaf

I had a vision of times long past —
Humans had just arrived in Nye
And the three midwives spoke
To all the people assembled.
The villagers were all seated on the ground,
With here and there a log newly cut
For fences or cottages.
Rowena, Roswitha, and Rachel
Stood on a large rock and addressed the folk:

Rowena

When a new babe is born,
Let us have a world ready to greet it,
Loving arms to hold it,
A home where the child can flourish.
A bright future also —
A place to grow up and learn,
No strife or careworn sorrow,
No battle or civil unrest,
A world where all can prosper,
No thieves or beggars and no senseless death.

Roswitha

When old age takes us away,
Let us close our eyes in peace,
Knowing we have left the world better —
A world to be proud of,
A world for our great-grandchildren,
A green and fertile place for all.

Rachel

In centuries long ago
Our ancestors sought the good life
A place to live in peace
A place to till and give birth

Part 3: IQ 166

Where babes can take a first breath
And elders can lie down to rest at last.
By some miracle we have found that place —
We know not why or how
Let us treasure this lovely gift
And treasure each moment that comes by.

Rowena

The green herbs grow in field and wood Bringing hope and healing to humankind — A blessing to those who read the signs, Who know the leaves, the fruits, the stems, The keys to unlocking ways to health: Let us give thanks for all this and more.

Roswitha

Let our world grow and prosper.

Rachel

Let persons of all kinds give thanks.

The End

Part 3: IQ 167

The Anatomy Club

In the Kingdom of Men, all of the posts of civil authority were held by White Magicians, so naturally those who opposed White Magic felt trapped. This was changed by "The Treaty of Olaf's Bridge." The Treaty states that civil authority and White Magic must henceforth be kept separate.

In the Land of Nye, the humans and the Muskrats have freedom of intellectual inquiry. Prior to the Treaty, a small but dedicated group dreamed of progress and called itself "The Anatomy Club." They did not like the restrictions of White Magic, including "The Bans of Olaf." One of the Bans was against dissection of cadavers. The Anatomy Club objected to this obstacle to progress. They saw a way forward to develop new sciences and new technologies -- including surgery beyond what "The Sisters of the Green Leaf" (the members of the guild of midwives) are able to do.

The "Parasite Theory" did not address the fact that when muskrats acquired speech they also went from twenty inches long (including the tail) to four feet tall and walking upright. This item featured prominently in the arguments between Taspel and Patrick and between Koshter and Sir Graham.

The members of the Anatomy Club, with the exception of Mayor Alpheus, Taspel, and Koshter, were seduced by the lure of Black Magic and its promises of rapid progress. On Earth, we think of anatomy as a noble humanitarian science, but in the Land of Nye it went astray for a while. The Treaty put it back on track. During the negotiations, Polara and Chistar persuaded everyone that Olaf was wrong about dissection. Some die-hard herbalists defended "The Bans of Olaf" but Chistar won them over in the end. The great anatomist Elhanon is now permitted to dissect three Muskrats who have died of natural causes.

The peacemaker Escalus points out that White Magic is to blame for this conflict since it did not allow for a pluralist society. (There are also people named "Escalus" on Planet Earth, such as the Prince of Verona in *Romeo and Juliet*.)

The White Magicians genuinely believe that advances in surgery are not needed. They have created a civilization with excellent nutrition and physical fitness, and the Sisters of the Green Leaf provide superb hospice care. Of course, herbal medicine does have limitations, but people do not complain. They have the excellent hospice care and an extensive poetry for saying good-bye to loved ones.

After the Treaty of Olaf's Bridge, research on anatomy and advances in surgery are permitted, but people are allowed to keep their traditions of herbal medicine if they prefer them. Of course, the struggle continues on – *Polara's Peace* and *The Zaisa Stratagem* describe several occasions when the Treaty comes unglued. The people of Nye are persistent about conflict resolution. They do not give up.

Part 3: IR 168

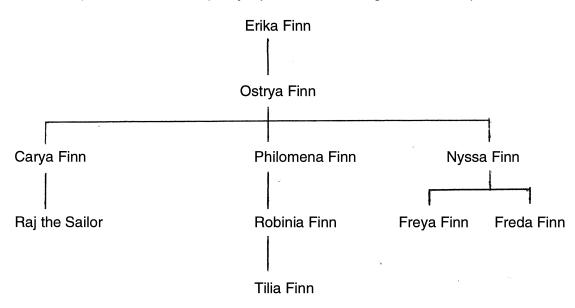
The Muskrats

The Talking Muskrats are about four feet tall, have a life expectancy of 120 years, and live in matriarchal clans. Among Muskrats, the offspring take the surname of the mother. The name that the Muskrats use for their country is "Sylvandom." The three main clans are the Ondatra, the Salix, and the Finn. The Ondatra clan is the royal clan that takes charge of food supply and water engineering projects. The Salix clan is entrusted with studying botany and ecology and assisting with water engineering. The Finn clan is responsible for relations with human beings and protecting the Muskrats from Black Magic. The Finn clan is skilled in White Magic and uses Ravens for long-distance communication. *The Council of Finns and Friends* was founded by Erika Finn when Patrick, Chipsa, Taspel, and Roswitha were three years old. There is a secret trail from Sylvandom to Bearsgard called "The Porcupine Path." Muskrat spies and emissaries can travel the path, swim the Lindenwater, and arrive in Bearsgard unseen.

The High Dam was built by human volunteers from Derbyville under the direction of Muskrats from the Ondatra and Salix clans.

The Finn Family Tree

(For the sake of simplicity, spouses and siblings are omitted.)



Members of *The Council of Finns and Friends:* Darian (head of the Council), the Grey Witch (assistant head), the Lindenwood hermit, the Brown Wizard, the Green Wizard, Damrod, Maia, Sir Graham, Thea, Freya Finn (chief spy), Freda Finn, Robinia Finn, Raj the Sailor, and two other Muskrats. Sylvia Ondatra represents the royal clan and Cinerea Salix represents the Salix clan. There are also about two dozen Muskrat spies and ten human spies (the rag-pickers) who report to the Council. The human Queen and the Muskrat Queen are honorary members of the Council and receive verbal reports from Darian and the Grey Witch once a year.

Black & Blue

This is a comedy routine that the Blue Wizard and the Sapphire Wizard perform every year at the Spring Festival. This dialogue supposedly takes place in Wentwood Castle during the first month of the Second Magic War. Two Black Magicians are trying to cook their breakfast in the kitchen of the castle. The text of this comedy was approved by the "Treaty of Olaf's Bridge Commission," which meets every month in Bearsgard.

Lieutenant: This damn castle leaks.

Sergeant: Good, say that louder and you'll get a demerit. Then I can have all the eggs to myself.

Lieutenant: Are these real eggs or magical synthetic eggs?

Sergeant: How should I know?

Lieutenant: You're the Supply Sergeant, you're supposed to know.

Sergeant: Yeah, right. That is just the way this outfit works — responsibility for things over which you have no control.

Lieutenant: Now who's going to get a demerit?

Sergeant: I put some blasting powder in the pepper shaker.

Lieutenant: You WHAT?

Sergeant: Variety is the spice of life.

Lieutenant: You don't need a commanding officer, you need a babysitter!

Sergeant: We've earned this good food as a special commendation — let's cook it.

Lieutenant: Hand over the skillet.

Sergeant: Here you go.

Lieutenant: This iron skillet is rusty!

Sergeant: Some knucklehead has been washing it with lye soap again.

Lieutenant: Why would anyone try to make an army out of a bunch of scapegraces and ne'er-do-wells?

Part 3: IT 170

Sergeant: Because all the goody-goodies belong to the Enemy. Use your head, bird-brain.

Lieutenant: That's exactly what this outfit needs — brains!

Sergeant: That's why you have me.

Lieutenant: Then why are you only a Supply Sergeant?

Sergeant: My brainpower will shine in a crisis and I will save the day. Just watch my smoke.

Lieutenant: Pass me a small chunk of lard for the skillet.

Sergeant: Add a couple of sticks to the fire first.

Lieutenant: This kindling is soaking wet! I told you this castle leaks.

Sergeant: There's some dry charcoal over here, we can use that.

Lieutenant: The charcoal is for the Incendiary Bomb Department — you're risking your life if you touch it.

Sergeant: Those fire-cracker jockeys think they're the greatest gift ever.

Lieutenant: Gift to what?

Sergeant: Chaos and mayhem. That's what this is all about isn't it?

Lieutenant: Speak for yourself — I'm in it for the plunder. I'm going to retire to the North Country with a stash of gold.

Sergeant: The deer and the raccoons aren't going to give you anything in exchange for your gold.

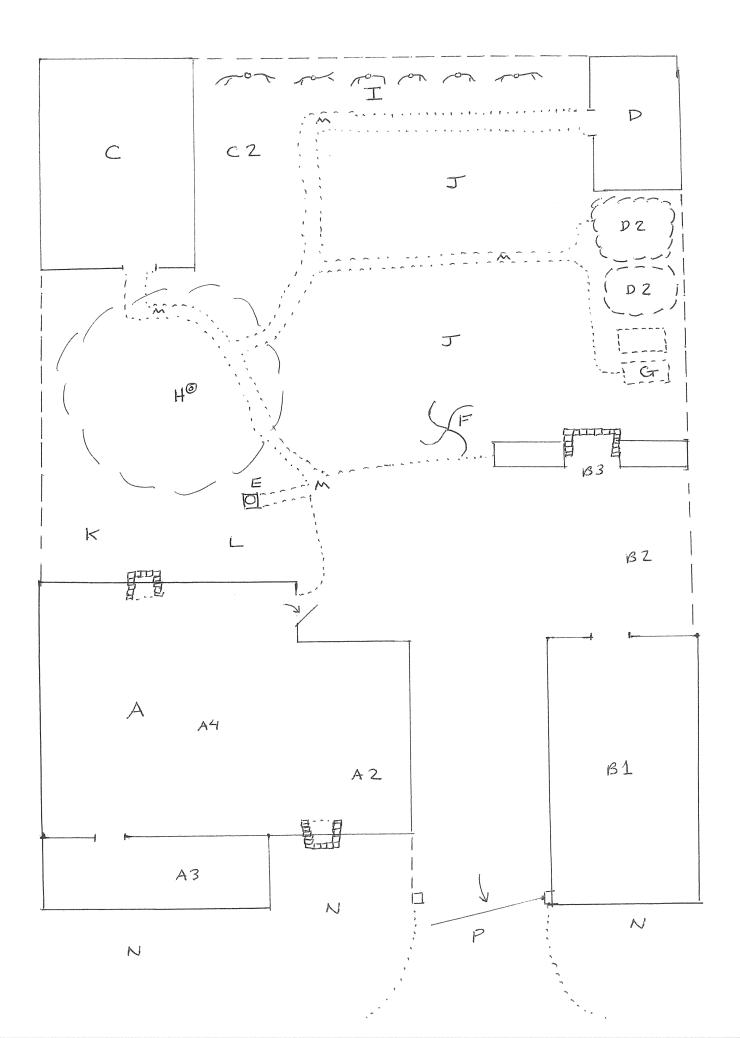
Lieutenant: Thanks for the tip, wise-ass.

Sergeant: I'll use the charcoal and bombs be damned — if I starve for lack of breakfast I'm dead anyway. Here, let me cook. I'll have these eggs done in a jiffy.

Lieutenant: Good. Then we can have scorched eggs and be ready for the morning tongue-lashing from the Higher-Ups. We're due on the parade ground in half an hour.

The End

Part 3: IT 171



Sketch of a typical cottage and garden of a follower of White Magic: Legend & Commentary

- A. Cottage with two chimneys, (A2) indoor winter kitchen, (A3) verandah with root cellar beneath, (A4) ladder to loft space above with sleeping area for older children (furnished with mattresses stuffed with straw).
- B. (B1) Tool shed and storage, (B2) work area for cutting and storing firewood, plus other tasks, (B3) outdoor summer kitchen and work area for preserving food. There is also a laundry work area and clotheslines (garments are linen or wool).
- C. Children's playhouse and (C2) children's garden. During the summer months, the older children sleep in the playhouse there is enough space to have friends over to visit for a few days at a time.
- D. Composting privy and (D2) compost piles.
- E. Well for fresh water.
- F. Stone herb spiral about ten feet tall, with the sloped terraced surface planted with culinary, aromatic, and medicinal herbs.
- G. Beehives.
- H. Chestnut tree: chestnuts are harvested for food, and in early autumn the leaves are fed to dairy cows (elsewhere in the village there are dairy farms). There is a swing in the tree for the children.
- Espalier pear, apple, and medlar trees (elsewhere in the village there are fullsize orchards). Groundcover under espalier trees is a planting of dill, borage, bee balm, clover, and comfrey.
- J. Large vegetable garden, with some herb beds to supplement the herb spiral.
- K. Plantings of hazelnuts (a favorite food in Nye, also called filberts or cobnuts).
- L. Plantings of currants, elderberries and quince.
- M. Path to outbuildings and gardens.
- N. Plantings of flowers and vines adjacent to the village street.
- P. Path to the village street and the gate to enter the yard (fenced around with a wooden fence).

In this agrarian utopia, there is no "entertainment industry." The people have the usual folklore, music, dances, and festivals, but they are not considered part of the economy. There are athletic fields and playgrounds elsewhere in the village.

On the following page is the sketch that Sir Graham and Erika Finn made for the construction of the Shrine of Philomena Finn in the Lindenwood Forest. These designs were carved in a slab of oak. The leaf carved above Philomena's name is a leaf of Ostrya virginiana, the namesake of Philomena's mother and a tree that grows nearby in the forest.

Part 3: IU2 173



Brother Bede Chronology (About the Other World, Planet Earth)

All dates are A. D. or C. E. Fictional items are in italics.

- Circa 1340: An alchemist who calls himself "Geber" writes a manuscript about how to make aqua fortis (from alum, oil of vitriol, and saltpetre) and aqua regia (made by dissolving sal ammoniac in aqua fortis).
- 1364: Marriage of Adam Fitzroy to Glenys (daughter of Huw of Powys Fadog) and marriage of William Fitzroy to a woman who is a fellow scholar.
- 1365: Birth of Rowena, daughter of William Fitzroy.
- 1366: Birth of Huw Fitzroy (son of Adam & Glenys) who later becomes Brother Bede.
- 1367: Birth of Richard of Bordeaux, later King Richard II of England.
- 1377: Richard becomes King at the age of ten.
- 1380: Huw becomes a postulant of a Benedictine Abbey in Wales. At this time he is fluent in English, Welsh, Greek, and Latin.
- 1381: Uprising of Wat Tyler and John Ball (Kent and London).
- 1384: Huw Fitzroy becomes a novice at the Abbey and is sent to Rome by his Abbot.
 In Rome he becomes friends with Friar Silenus.
- 1386: Huw takes full vows at the age of twenty and chooses the name "Brother Bede."
- 1386-1389: Geoffrey Chaucer writes The Canterbury Tales.
- 1390: (0 APC in the Land of Nye) The Plague Cusp. Three members of the hunting parties are soldiers in the "Cheshire Archers," the elite bodyguard of King Richard II.
- 1400: Death of King Richard II.
- 1403: The battle of Shrewsbury (see Shakespeare's Henry IV, Part 1, Act 5).
- 1408: Defeat of Welsh leader Owain Glyn Dŵr (Owen Glendower in Shakespeare) by the forces of King Henry IV under the command of his son Prince Henry. Brother Bede's father Adam Fitzroy dies in the battle. The double of Brother Bede, who remained in the Other World, is excommunicated at this time for supporting the Welsh cause. He and some Welsh friends go into exile in the regions of Ireland beyond the reach of Anglo-Norman rule. He still corresponds with his old friend Friar Silenus in Rome.

Part 3: IW 175

Index of Botanical Names To Parts One, Two, and Three

(Items relating to Planet Earth are 100% nonfiction)

The two-letter codes refer to the footers of the documents (or "chapters" you might say).

Linden tree: Lindenwood Forest, the Lindenwood hermit, the Lindenwater (a river), lindenflower tea, and Tilia Finn. These names occur throughout the work. The inspiration for these names comes from two tree species: *Tilia cordata* (the Littleleaf Linden or Lime of Europe) and *Tilia americana* (the Basswood of North America). The Littleleaf Linden has been planted as a shade tree since ancient times (in both the Land of Nye and Planet Earth). The Basswood is a tall tree famous for attracting lightning strikes.

Linnea: This name also occurs throughout the work. Linnea is a common woman's name in Sweden and shows up in botany through the work of Carolus Linnaeus (Karl von Linné) the great Swedish naturalist and taxonomist. He chose a lovely wildflower of Lapland, Linnaea borealis, to bear his own name. There is a famous portrait of Linnaeus holding a small blossom of Linnaea borealis. He was a brilliant botanist, but his virtues did not include modesty. The editor simplified the spelling from Linnaea to Linnea to aid pronunciation.

Oak tree: The Land of Nye is a flat world held up by a giant oak tree called Thor's Oak (similar to the ash tree Yggdrasil in Norse mythology on Planet Earth). The name of the oak genus is *Quercus*, and it has about 600 species throughout Planet Earth and a dozen species in Nye. Thor's Oak should logically be the largest-growing oak species native to northern Europe if you want to look that up.

Salix: This name occurs throughout the work – it is the genus name for willows, a group of trees, shrubs, and dwarf shrubs represented by about 400 species on Planet Earth and two dozen in the Land of Nye. Willows are important for erosion control on streambanks, serve as forage for livestock and wildlife, and are the source of the medicinal substance salicin. Salix is also the name of one of the three major clans of Muskrats – willow trees figure prominently in the diet, habitat, economy, history, and folklore of the Muskrats. The first name of a Muskrat of the Salix clan is often the species name of a type of willow.

"The Three Birches": *SL.* The inn in Arnoldsdorf is named for the three birch trees that stand near its entrance – one American White Birch *Betula papyrifera* (also called Canoe Birch or Paper Birch), one Yellow Birch *Betula lutea,* and one Black Birch *Betula lenta.* The Count of the Western Marches planted these trees as a way to teach people about his homeland in the Mohawk River Valley. These three species are common in North America but rare in the Land of Nye.

- Peaches: *SN.* The Common Peach *Prunus persica* is well-known for its delicious fruit but difficult to grow successfully. It occurs in the Land of Nye but was not used for food until the founding of the New Realm. On Planet Earth, the peach is native to China and has been cultivated since ancient times.
- Spelt: SN & SQ. Spelt is a hardy wheat, *Triticum spelta*, that was grown in Medieval Europe.
- Barleycorns: *SP.* Barleycorns are the seeds of the barley plant *Hordeum vulgare*, a grain crop used since antiquity for food and for making beer and ale.
- Flour (wheat): *SC.* The biology and history of wheat could fill an entire library. Wheat is a group of edible grain crops of the genus *Triticum*, especially *Triticum aestivum*. The history of wheat is governed by the genetic phenomenon called "polyploidy," which means multiple sets of chromosomes. If you wish, you can research the types of wheat grown in 14th-century England and how many sets of chromosomes they had.
- Oats: SC & SQ. This is Avena sativa, a grain crop used for human and animal food. It is more tolerant of cold temperatures than wheat or barley, but the yields are generally lower. The people of Nye consider the consumption of oatmeal and oat cakes to be a sign of virtue. There is very little "food processing" in Nye the natural diet is loaded with nutrients, fiber, vitamins, minerals, and phytonutrients. The first Blue Wizard discovered what we call vitamin B₁₂. He experimented with brewer's yeast and seaweed as possible sources of the vitamin and eventually concluded that vegans should have a twice weekly portion of oysters, mussels, or fish roe, or a daily portion of dairy products.
- Apples: SC, SN, and "Typical Cottage and Garden." This is the common domestic apple, Malus domestica or Pyrus malus, that came to Nye from Cheddar, England. There are also wild apples and crabapples that grow in Nye as well. The people of Nye use cider vinegar for cooking and cleaning, but the only alcoholic drinks they have are beer and ale. Brother Bede had several manuscripts about making distilled spirits, but he destroyed them shortly after arriving in Nye. He was the only person who had any recollection of them. On Planet Earth, the apple has been cultivated since ancient times. It probably originated in the western Himalayas and traveled westward by way of northern Persia, Asia Minor, the Caucasus, and the Mediterranean region.
- Myrica: SC. The Northern Bayberry, Myrica pensylvanica, is a shrub native to North America (it grows from Newfoundland, New Brunswick, and Ohio down to North Carolina). In both Planet Earth and the Land of Nye, it is found in poor soils, usually near the seacoast. Although it grows in shrub form, it can reach a height of 35 feet. Many species of birds eat the fruits. The wax on the fruits is used to make aromatic bayberry candles. Current name = Morella pensylvanica.

- Rhus: SD. The villain Rhus the Necromancer gets his name from our old friend poison ivy Rhus radicans, a plant well-known in North America to those who love the outdoors or gardening. This plant is rare in the Land of Nye, which consists mostly of undisturbed wilderness and well-tended gardens. In North America, poison ivy loves vacant lots, guard rails, and neglected landscapes. None of these things occur in the Land of Nye. Although it is difficult to believe, the unattractive white fruits are eaten by over 60 species of birds. The current scientific name of poison ivy is Toxicodendron radicans.
- Artemisia: SD. This is a genus of wildflowers, herbs, and shrubs including wormwoods, mugworts, dusty miller, sagebrush, southernwood, and tarragon. Muskrat names often come from common plants of the countryside they do not distinguish between humble and aristocratic plants.
- Sassafras: *SD.* The small tree *Sassafras albidum* is a favorite of the Count of the Western Marches he uses extracts in his herbal concoctions. The people of Nye use the wood to make buckets and barrels. The outer bark of the roots is used to make sassafras tea. The twigs are browsed by cottontail rabbits, Muskrats, and deer.
- Halesia: SD. Halesia carolina (also called *H. tetraptera*) is the Carolina Silverbell. This lovely small tree grows on wooded slopes and along streambanks. It is native to the southern half of the eastern U.S. and has been used in the nursery trade since 1756 there are currently about five cultivars recommended for landscape use.
- Achillea: SD. Achillea millefolium, Yarrow or Milfoil, is very common in both the Land of Nye and North America this hardy perennial is found in fields and roadsides (and in the editor's back yard in Connecticut). It can thrive in poor, rocky soil. Those humans in the Land of Nye who are most devoted to White Magic often follow the Muskrat custom of choosing botanical names for their children. In the Land of Nye, even weeds are respected and often used for food, medicine, aromatherapy, fiber, decoration, stuffing mattresses, or scattering on earthen floors. The flat clusters of flowers are used in tea for colds and fevers. On planet Earth, some biodynamic farmers plant yarrow in their pastures as a flavorful tonic for their livestock.
- Alfalfa: SW. This forage plant of the pea family, Medicago sativa, is native to Europe and was brought to Nye by the Count at the specific request of the dairy farmers of Nye. On Planet Earth, it has become a common plant in hayfields the second and third cuttings of hay have higher percentages of alfalfa. High-alfalfa hay is unsuitable for young calves. Alfalfa is the Spanish-Arabic name used in North America and Australia, and lucerne is the European name. It has advantages such as deep roots (up to 50 feet deep) that bring up nutrients and provide drought-resistance. The roots can fix atmospheric nitrogen. The people of Nye learned to eat alfalfa sprouts from experiments conducted by Queen Sarah in her youth.

- Timothy: *SW.* This grass native to Eurasia, *Phleum pratense*, is traditionally grown for hay along with other grasses and clover or alfalfa. It came to Nye with the villagers from Cheddar, England. How common was timothy in 14th-century England? Good research question give it a try.
- Tomatoes: *ZC.* This is the familiar garden plant *Lycopersicon esculentum* that the Count of the Western Marches brought to Nye when he traveled to Planet Earth to get the Slippery Elm seeds. The gardeners of Nye have mastered the art of composting and grow delicious heirloom tomatoes of many shapes and colors. The tomato is native to South America and the name originally came from the Nahuatl language.
- Slippery Elm: QI. This North American tree was brought to the Land of Nye from Planet Earth when the Count of the Western Marches was allowed to make a trip to retrieve seeds. It is a medium-sized tree (not of landscape value) found from New England, Quebec, Ontario and North Dakota down to Florida and Texas. The name "slippery" comes from the yellow inner bark, which was ground into flour or chewed as a preventive for scurvy (it is high in vitamin C).
- Squash: QJ. The squash that Darian was bringing from his garden to his cottage is what we would call zucchini. It is another plant brought to Nye from North America by the Count of the Western Marches. Seeds of summer squash found in caves in Mexico have been dated as early as 8,000 BCE.
- Beans: QJ. These are pole beans, which are favored in the compact, intensively-cultivated gardens in Nye and have been bred for size and flavor. They were brought to Nye by the Count. He selected an heirloom variety from his own Iroquois crops of New York State (still available on Planet Earth under the name "Genuine Cornfield"). Mendel's Laws were not known in fourteenth-century England, but they were discovered in Nye by the first Blue Wizard.
- Hazel (hazelnut, filbert, or cobnut): QJ and "Typical Cottage and Garden." Corylus avellana.

 This is the European species of hazelnut that is widely planted for nut production for human consumption. It came to the Land of Nye from Cheddar, England with the transplantation of humans (they had nuts with them that they planted and grew for food). It has now escaped into the wild in Nye. The center for commercial filbert growing in North America is Oregon. There are several species of Corylus native to North America (not grown commercially), and these also occur in the wild in Nye. If you are looking for a conversation piece, ask at your local nursery for Corylus avellana 'Contorta', also known as "Harry Lauder's Walkingstick."
- Spicebush: *QJ.* Lindera Brook: *SW.* The Lindera Brook in the Lindenwood Forest is named for the spicebush, *Lindera benzoin*, which grows in wooded bottomlands. In North America it is found from Maine, Ontario, Michigan, Iowa, and Kansas to Florida and Texas. Early land surveyors regarded this shrub as a sign of good

- agricultural land. If you scratch a twig with your thumbnail you will notice a spicy scent.
- Chamomile: *QN.* The plant called "chamomile" or "camomile" in the Land of Nye is unique to Nye and does not occur on Planet Earth. It is similar to our plant *Chamaemelum nobile*. On Earth, there are a dozen or so plants of the family *Asteraceae* that include "chamomile" in their common names.
- Ostrya (American hophornbeam) Carya (hickory) Nyssa (sour-gum and tupelo) Robinia (black locust): "The Muskrats." You will see from the partial family tree of the Finns that many of the given names are genera of North American native trees. The plant life of Nye is a mixture of Old World, New World, and new species unique to Nye. When the Count of the Western Marches first came to Nye in the year 235 APC, he found many old friends in the fields and forests. The middle name of a Muskrat is generally the given name of its mother. The "Shrine to Philomena Finn" in the Lindenwood Forest has a carving in the wood depicting a leaf of the hophornbeam tree Ostrya virginiana. The other two shrines elsewhere have different carvings. The Ostrya leaf is in honor of Philomena's mother Ostrya Finn. The hophornbeam tree is common in the Lindenwood Forest and several can be found in the glade where the shrine is located. This tree is sometimes called "ironwood," a name it shares with its cousin Carpinus caroliniana (which, to add to the confusion, is also called "hornbeam").
- Chestnut: "Typical Cottage and Garden." This is the European Chestnut Castanea sativa which has edible nuts (brought to Nye with the villagers from Cheddar, England). There are also North American species of Castanea that grow in the wild in Nye (no chestnut blight in Nye!). In the early autumn the leaves are fed to dairy cows this idea came from Travels with a donkey in the Cévennes by Robert Louis Stevenson.
- Pear: SN and "Typical Cottage and Garden." The common domestic pear is Pyrus communis.

 The people of Nye are clever at grafting and will graft more than one variety of fruit on a single tree. This enables the necessary cross-pollination of different varieties. The trees in a private garden are pruned in espalier form, but elsewhere in the village there are full-size orchards.
- Dill, borage, bee balm, clover, and comfrey: "Typical Cottage and Garden." These common herbs are grown as ground-cover under the fruit trees and as a source of pollen and nectar for the bees. These plants were suggested by a friend of the editor who is an expert on permaculture. Clover is also grown as forage for dairy cows, in combination with other hay plants.
- Currants, Elderberries, and Quince: "Typical Cottage and Garden." This is the "small fruits garden" used for jams and jellies. Currants can also be dried like raisins. Grape vines, olive trees, sugar beets, and sugar cane are not present in the Land of Nye. The jams and jellies are made without sugar. The primary sweeteners in

Nye are honey and maple syrup. The people of Nye learned how to make maple syrup from the Count of the Western Marches, and they often plant sugar maple trees for that purpose.

- Amelanchier (as in "Amelanchier Brook"): SG. This is an extensive genus of small trees and large shrubs in the rose family (Rosaceae). The flowers are white and the dark-colored red or black fruits are edible. In North America, the common names are Shadblow, Shadbush, Juneberry, and Serviceberry. The names "Shadblow" and "Shadbush" come from the fact that these trees bloom at the same time that shad migrate upriver to spawn (in tidal rivers in the Eastern United States). The name "Serviceberry" comes from "funeral service." In colonial America, one had to wait for the ground to thaw before one could have a burial or "service." When Amelanchiers bloom, it means that the time has come. Humans value the fruits of Amelanchiers, but good luck getting to them before the many species of birds and mammals that also prize them. Cottontail rabbits, beavers, Muskrats, and deer browse the twigs.
- Medlar ("medlar tree" or "common medlar"): SN and "Typical Cottage and Garden." This shrubby tree, Mespilus germanica, was grown for fruit in Medieval Europe.

 Originally from southeast Europe and southwest Asia, it was first cultivated in Greece around 600 BCE. It is a member of the rose family and related to hawthorns and juneberries. The habit is shrub-like and its height is generally less than 26 feet. It requires warm summers and mild winters, preferring sunny, dry locations with slightly acidic soil. The small, unattractive fruits are eaten in winter after the fruit has aged or "bletted." Medlar seeds were brought to Nye from the village of Cheddar, England, but in both Nye and England they could not compete with pears and apples as orchard crops. Medlars are still grown in Nye by a few botanists and die-hard traditionalists. The fruit is mentioned by Chaucer in the Prologue to The Reeve's Tale, as the Curators of the Bearsgard Academy Herbarium will be happy to inform you.
- Spruce (genus *Picea*): *QN.* I think most of my readers are familiar with spruce trees. A thicket of stunted spruces is a common occurrence on the shoulder of a mountain. The Blue Wizard was fortunate to land on the spruces and not on the rocks on either side.

Aqua Regia Chemical Reactions

Here is some technical background for Earthlings about the *aqua regia* that the Black Magicians concocted (and pretended to concoct).

Aqua regia is a mixture of aqua fortis (nitric acid HNO₃) and acidum salis (hydrochloric acid HCl), usually in proportions of one to three respectively. It is a red, yellow, or gold fuming liquid and breaks down rapidly once it is mixed.

This chemical mixture was invented by Arabic-speaking alchemists and came to Europe through the Latin writings of an author known as "Geber" (just prior to the birth of Brother Bede in the fourteenth century). "Geber" is copied from an Arabic name and modern scholars refer to him as "Pseudo-Geber." Alchemists often tried to hide their secrets and filled their writings with occult symbols and codes, but Pseudo-Geber is one of the more intelligible ones. The manuscript that Orontius stole from the Brown Wizard was written by Geber and came to the Land of Nye in William Fitzroy's chest (which was on its way to the library at Oxford).

Aqua regia is the only substance that will dissolve gold and platinum.

To make *aqua regia*, the first step is to make *aqua fortis*. In ancient and medieval times this was done by mixing alum $KAI(SO_4)_2 - 12H_2O$, oil of vitriol H_2SO_4 , and saltpetre KNO_3 . This mixture was heated over a fire — the vapors being caught and condensed into an aqueous solution of HNO_3 .

The next step has to be done at the last minute because the resulting mixture is unstable. A batch of fuming *aqua regia* was made by combining three parts of *sal ammoniac* NH₄Cl (white powdery crystals) with one part of *aqua fortis* HNO_{3(aq)} (liquid). *Sal ammoniac* is a rare mineral found in volcanic deposits (including some in the North Country near the iron mines).

When the Black Magicians made a batch of arrow poison, they would soak the three buttons in freshly-mixed *aqua regia*. The buttons were an alloy of gold and a magical toxin. They knew when the poison was finished because they saw red crystals form at the bottom of the cauldron. Medieval alchemists (and the Black Magicians) referred to these crystals as "dragon's blood." To a modern chemist, they are gold (III) chloride.

The decomposition of aqua regia is as follows:

$$HNO_{3(aq)} + 3HCI_{(aq)} = NOCI_{(g)} + CI_{2(g)} + H_2O_{(l)}$$
 $2NOCI_{(g)} = 2NO_{(g)} + CI_{2(g)}$
 $2NO_{(g)} + O_{2(g)} = 2NO_{2(g)}$

Part 3: IY 182

Study Questions

(As part of a roundtable discussion, these questions can be researched with hand-held devices that have Internet access. Each person can volunteer to take one question and report back to the entire group at the conclusion of the research session.)

- 1. What was the state of knowledge of midwifery in England in the 14th century?
- 2. How can a flat world have solstices, equinoxes, and tides? Find information written by astronomers who believed that the Earth was flat and see what their explanations were. There may be several explanations state which one you think is the best. These sources will probably date from the Middle Ages.
- 3. Brother Bede has Latin books by Pliny the Elder, Dioscorides, and Albertus Magnus. When did these individuals live and what did they write about botany?
- 4. The Lindenwood hermit is widely known for the bread he makes from spelt. What is spelt, how is it grown, and how was it used in Medieval Europe? (Try an Internet search for "spelt flour" and "spelt whiskey" and see what you find. If you search for "Bob's Red Mill" you can re-create the Middle Ages in your kitchen.)
- 5. The Green Wizard is responsible for teaching "the quadrivium and the trivium." What are these seven subjects and how were they taught in the 14th century?
- 6. Orontius steals a Latin manuscript about alchemy. What is alchemy? Where is it mentioned in *The Canterbury Tales* by Geoffrey Chaucer and a play by Ben Jonson? From what language does the word "alchemy" come?
- 7. Where did Brother Bede get the names "Camulodunum" and "Aquae Sulis"?
- 8. Brother Bede took his name from an earlier English monk who was known as "the Venerable Bede." In what century did the earlier Bede live and why is he famous?
- 9. What are the sources of the names Thor's Oak, Fenrir, Freya, and Grendel? Who is "Fenrir Greyback"?
- 10. What happened in England in the 14th century as a result of the Black Death (the bubonic plague)? What was the true cause and means of spreading this pandemic?
 - (The above questions relate to the 14th century, but now we shift to the 17th. Note that the correct name for the Six Nations of the Iroquois is The Haudenosaunee Confederacy.)
- 11. The Count of the Western Marches comes from the Seneca people. What are the other five nations of the "Six Nations of the Iroquois"? Give a brief summary of the history and culture of the Six Nations, up to the coming of European settlers.
- 12. The Count is known as a lacrosse champion. What were the rules and traditions of this game among the Six Nations of the Iroquois?
- 13. What was the role of women among the Iroquois peoples?

Part 3: IZa 183

Discussion Questions

- 1. The Land of Nye has a 100% sustainable economy, free education, free health care, government by consensus, no poverty or hunger, and very little crime. Population growth is consciously and voluntarily limited to about 10,000 people (after the founding of Castra Polara and Castra Zaisa, the total gradually increases to about 15,000 and then levels off again). Do you think that such a world would still experience discontent and violence such as wars or riots? Why or why not? If you lived in such a world, would you feel hemmed in and ready to make trouble?
- 2. If you were given a group of eighty people and told you had to arrest another group of sixty people armed with spears, swords, and a few bows and arrows, how would you do it? You are not allowed to kill the perpetrators, and you do not have access to modern technology such as tear gas or water cannons. What would you do?
- 3. Toward the end of *The Quest of the Ten Coins*, Roswitha says to Sir Patrick, the Blue Wizard, Chipsa, and Taspel "The four of you can be leaders in the peace movement if you wish." Do you see yourself as a peace advocate? Why or why not? What can we do to promote lasting peace in our own world? Was William Shakespeare a peace advocate? Read these two scenes and see what you think: *The life of Henry the Fifth*, Act Five, Scene Two (especially lines 22-67) and *The first part of King Henry the Fourth*, Act One, Scene One (especially lines 1-33).
- 4. At age 16, Chipsa and Taspel are too young to fall in love, but then it turns out they have a successful relationship going back hundreds of years. Chipsa and Taspel do not get married until after they complete secondary school, perform their three years of voluntary service, and study Philosophy for four years at the Bearsgard Academy. In later life, Sir Patrick has a partner named Sir Lionel. What do you think about true love? How do Chipsa and Taspel compare with other couples you have come across in your reading?
- 5. In the Land of Nye, the White Magicians are vegetarians, and herbalists like the Lindenwood hermit are vegans. Do you have friends who are vegetarians? Are you one? Do you think vegetarianism is more important now than it was forty years ago? Why or why not?
- 6. Imagine that you are magically transported to a new world with nine hundred other people. You are the only one who has any memory of politics and religion on Planet Earth. The people are docile, hard-working, and follow the Golden Rule, but when it comes to politics and religion they must make up their own or follow your teaching. What would you tell them? What would you leave out? Why?
- 7. Do human beings grow weary of peace? Why or why not? Can we see it happening in our world right now?

Part 3: IZb 184

The Three Charities

Fans of *The Letters and Diaries of Queen Chipsa* are encouraged to support the following three small charities. All three of them are 501c3 non-profit organizations.

To request additional copies of the book, contact the editor Alan Eddy at sirpatrickofnye@gmail.com.

1. The Bawa Health Initiative (BHI)

P. O. Box 432

Wallingford, CT 06492

www.bawahealth.org

This organization carries out health improvement projects for the village of Bawa, West Province, Cameroon, Africa and surrounding villages (in the French-speaking part of Cameroon). Bawa is in a mountainous rain forest region with an economy of subsistence agriculture. As of November 2019, the construction and furnishing of the new health clinic have been completed. Due to the decline in child mortality, villagers are sending their children to school.

2. Sustainable Organic Integrated Livelihoods (SOIL)

124 Church Road

Sherburne, NY 13460

www.oursoil.org

"Transforming waste into resources in Haiti since 2006."

This organization provides composting toilets and agricultural development in several key locations in Haiti. A small but dedicated group of people in both Haiti and the U. S. have worked since 2006 to improve sanitation, waste recycling, and crop production. With additional support from individual donors, they could increase their programs.

3. TREE foundation

www.treefoundation.org

This organization supports tree research, education, and exploration at a global scale. All of our funds go toward urgent forest conservation priorities. They currently include: saving the last 5% of forests in northern Ethiopia; providing environmental education about forests to youth in developing countries; conducting citizen science expeditions to the Amazon; building canopy walkways for eco-tourism; and providing scholarships in conservation education for women from countries where forests are at greatest risk.

Thank you and be well, Alan Eddy.

Part 3: IZc 185