Hobbit
Projects

by Mary Jo Fahey

Title Page
Table of Contents

Chapter 1: Middle-Earth Inspired Lifestyle

Chapter 2: Coffee Shops and Classrooms

Chapter 3: Museum and Showrooms

Chapter 4: Biochar Trial
Notes
Bilbo Baggins is talking to Thorin about two projects that will need their help to become farthings in Shire-like regions built for Hobbits, elves and humans. One of the projects would be built on land adjacent to Walmart, a large retailer with home furnishings to be merchandised in smial rooms that have white walls and plenty of natural light.

The other project was intended for a 600 acre wooded area called Tradewinds that needed interesting hobbit architecture as a theme for several components. Both projects would need to be launched simultaneously. Bilbo was busy making charts to communicate details to Thorin.

“Why would humans want to adopt a Hobbit lifestyle?” asked Thorin.

“It's all about food,” said Bilbo.

“Food?” asked Thorin.

“Hobbits like really good food,” said Bilbo.

“And Middle Earth-inspired design is part of the plan?” asked Thorin.

“That's correct,” said Bilbo.
“Do you know any designers?” asked Thorin.

“I'm planning to invite a 3D designer named Larry Rosenthal to be part of the project,” said Bilbo.

“Will he need to design any Hobbit holes?” asked Thorin.

“Two for each project,” said Bilbo.

“To scale?” asked Thorin.

“Yes,” said Bilbo.

“And the other structures?” asked Thorin.

“The other, human-size structures will need to be constructed of natural materials such as wood and stone equipped with solar,” said Bilbo.

“Will solar panels provide enough power?” asked Thorin.

“We'll need to do some tests,” said Bilbo. “I found an interesting small camper that has solar panels and a low-wattage air conditioner that I'd like to try.”

“What manufacturer?” asked Thorin.

“Derek Michael,” said Bilbo. “He created a company called Happier Camper\(^1\) in a neighborhood of Los Angeles called Frogtown\(^2\).”

“Frogtown?” asked Thorin.

“It's also called the Elysian Valley,” said Bilbo. “It's in central L.A.”

\(^1\) Happier Camper, 4178 Chevy Chase Dr., Los Angeles, CA, 90039, 470-222-6728, happiercamper.com.

“How small?” asked Thorin.


“And the inverter?” asked Thorin.

“A waveform Zamp Solar power inverter provides 600 watts of medical-grade power for sensitive devices,” said Bilbo.

“What is medical grade power?” asked Thorin.

“That's another name for hospital grade,” said Bilbo.

“So you want to see how much power you can generate?” asked Thorin.

“I'd like to order twelve and use them as offices,” said Bilbo. “We can operate off the grid through the early stages of the projects.”

“Campers as offices?” asked Thorin.

“The brochure\(^1\) contains a picture of a camper as an office,” said Bilbo.

“Is there a reason the Walmart and Tradewinds projects need to launch at the same time?” asked Thorin.

“Both projects will require work from similar contractors—surveyors, landscapers, stone masons, pavers, bricklayers, plumbers and carpenters,” said Bilbo. “Both projects will also need similar gardens and a coffee shop.”

“So that must be why you're making charts,” said Thorin.

---

“The project components are slightly different and the charts will help,” said Bilbo as he nailed both charts on the wall

**Walmart**¹
- Permaculture Garden
- Goat Mountain (demo only, no animals at present)
- Barn for Chicken Coop maintenance and Worm Factories
- Cabin accommodations for 4 resident caretakers
- Cabin/workspace for caretakers
- Animal feeders
- Parking
- Coffee Shop/Four Classrooms
- Fence and Three Gates
- Middle Earth Museum
- Made in America Showrooms

**Tradewinds**²
- Permaculture Garden
- Goat Mountain (demo only, no animals at present)
- Barn for Chicken Coop maintenance and Worm Factories
- Farm house renovation (to house 2 resident caretakers)
- Animal feeders
- Parking, expanded
- Coffee Shop/Four Classrooms
- Fence and Gates
- Biochar Trial

**Public Relations/Promotion**
- Still photography (including aerial)
- On-site television studios
- TV new stories and documentaries Press releases
- Magazine stories and reprints

¹ Walmart Project, http://housing.x10host.com/pompano_shire_07_20_17.pdf
“Can we go over your charts line item by line item?” asked Thorin.

“Good idea,” said Bilbo.

“Before we start, I'd like to talk about brand licensing,” said Thorin. “There's been speculation in the press that brand licensing for ‘The Hobbit’ will never happen.”

“That story was related to the addition of a Hobbit section of Disney World,” said Bilbo. “Disney is the largest global brand licensor with $39.3 billion in retail sales of licensed merchandise in 2013. This is different.”

“Can you explain?” asked Thorin.

“Rather than being lumped in with the rest of Disney's licensees, this project is designed to help Walmart compete with Amazon and make sure they don't close stores,” said Bilbo.

“Amazon is getting aggressive with their fleet of Boeing jets and plans for drone delivery,” said Thorin. “In 2016, The Seattle Times reported that their robot army grew by 50 percent.”

“Late last month, a publication called The Weekly Standard published an article titled ‘Time to Break Up Amazon?’,” said Bilbo.


“It's a conservative opinion magazine originally published by News Corporation,” said Bilbo. In 2009, the magazine was sold to MediaDC, a subsidiary of Clarity Media Group which is part of The Anschutz Corporation.

“What do you know about The Anshutz Corporation?” asked Thorin.

---

“It's a privately held company founded by Fred Anshutz who was in oil,” said Bilbo. “Fred's son Philip took over the company in 1962. Today, The Anshutz Corporation has diversified investments in stocks, real estate, railroads, entertainment and sports teams. Anshutz has a film financing subsidiary\(^1\) that financed three of *The Chronicles of Narnia* films.”

“C.S. Lewis wrote *The Chronicles of Narnia* novels,” said Thorin.

“Yes, I know,” said Bilbo. “Lewis and Tolkien were close friends. They were both faculty members at Oxford University and were part of a literary group known as the Inklings.”

“Small world…,” said Thorin.

“There's another aspect to a Walmart plan that's important,” said Bilbo. “Amazon bought Whole Foods in June for $13.7 billion.”

“And, Hobbits are *known for their very good food!*” said Thorin.

“Walmart is headed in that direction,” said Bilbo. “They're adding more and more organic foods and they partnered with Wild Oats Market.”

“Wild Oats Market?” asked Thorin.

“Wild Oats Market used to be a chain of health food stores and now they're a natural foods company,” said Bilbo. “Walmart sells 30 of their products that are mostly organic.”

“They must be large if they supply Walmart stores,” said Thorin.

“They've been part of a private equity firm called The Yucaipa Companies since 2012” said Bilbo. In 2008, Wild Oats was purchased by Whole Foods. The Federal Trade Commission opposed the purchase saying that it was a violation of antitrust laws. Whole Foods was forced to sell Wild Oats in 2009.”

---

\(^{1}\) Walden Media, https://en.wikipedia.org/wiki/Walden_Media
“Consolidation,” said Thorin.

“That's why *The Weekly Standard* has proposed an Amazon break-up,” said Bilbo.

“Antitrust cases have sometimes dragged on and on for years,” said Thorin. “IBM was sued in the 1960s and the case lasted eleven years.”

“Which is why Walmart needs an anti-Amazon strategy of their own,” said Bilbo.

“Is this Walmart project a demonstration or pilot project?” asked Thorin.

“Yes,” said Bilbo. “It's a model project for any Walmart SuperCenter store.”

“Does Walmart own the land?” asked Thorin.

“No,” said Bilbo. “They would need to purchase or lease from Isle Casino Racing Pompano Park.”

“Where is it located?” asked Thorin.

“There are two parcels,” said Bilbo. “One is approximately 787 feet by 1109 feet, and the other is approximately 787 feet by 1,320 feet.”

“How do you know the dimensions?” asked Thorin.

“I took the latitude and longitude numbers off Google Maps, calculated the distance between points and converted them to feet,” said Bilbo.

“What about Tradewinds?” asked Thorin.

“Broward County inherited the 627 acre complex from Marguerite C. McLean,” said Bilbo. “Marguerite intended the land to be used for education. The complex includes a farm house, stable and several buildings.”

“Is it used for education?” asked Thorin.
“Somewhat,” said Bilbo. “There is a farm with a few animals. School children visit. They arrive in school buses and take a tour. Most of the 627 acres is full of woods. There are trails for horse back riding.”

“I see that both locations have Permaculture Gardens” said Thorin. “Those are the nutritionally dense plants we will be planting around the housing co-op.”

“The plants are the same, but the planting will have a different arrangement,” said Bilbo.

“Do you have a garden layout planned?” asked Thorin.

“I dowsed a layout1 quite some time ago and I showed it to you when we discussed the plant replacement project for the housing co-op,” said Bilbo.

“I remember now,” said Thorin. “You have a plan to have that map printed on a vinyl banner.”

“What is a Goat Mountain?” asked Thorin.

“Designer Larry Rosenthal coined that term,” said Bilbo. “It's a wooden structure steep enough to interest dairy goats.”

“I'm also remembering your interest in dairy goats,” said Thorin.

“I'm familiar with your plan for chicken coops and worm factories,” said Thorin. “That's part of your plan for the housing co-op.”

“These projects won't have leftover food from housing co-op dining,” said Bilbo. “They will when there is a coffee shop. In the beginning, they may need to use seaweed in the worm factories.”

“Do you have a plan to collect seaweed?” asked Thorin.

1 Permaculture Garden Layout
http://articles.x10.mx/garden_playground_layout.pdf

2 (Lowes) Edsal 26.75 inch Utility Cart, $113.04.
“The Edsal utility cart sold at Lowe's is perfect for collecting seaweed,” said Bilbo. “It has holes that the sand can pass through.”

“Don't the municipalities all collect seaweed?” asked Thorin.

“Seaweed collection occurs before 8:00 a.m.,” said Bilbo. “It washes up all day long.”

“You have a plan for on-site resident caretakers in both locations,” said Thorin.

“The farm house at Tradewinds would need to be renovated,” said Bilbo. “There are no appliances at the present time.”

“And the Walmart project?” asked Thorin.

“The caretakers could use the Happier Campers while cabins are constructed,” said Bilbo. “I found a company called Solidbuildwood.com with very nice cabin kits.”

“How many cabins would be needed for 4 caretakers?” asked Thorin.

“Three,” said Bilbo. “Two cabins from a kit called Haven Loft that's 20 feet by 16 feet for residences and one for a work/activity space that includes a washer and a dryer. The work/activity cabin could be a Haven Loft, or a similar cabin without the extra loft space.”

“What about plumbing and electricity?” asked Thorin.

“A plumbing contractor would be needed,” said Bilbo. “Solar is a possibility. It's also a possibility for the Tradewinds farm house renovation.”

---

1 (Solidbuildwood.com) Haven Loft 20x16 cabin, inside Area: 640.00 sq. ft. Price: $19,500.00
“Cabins sold as kits could be added to the Walmart Web site,” said Thorin.

“Solidbuildwood.com has a very nice 10 foot by 10 foot garden shed with windows that may be perfect for a small solar application,” said Bilbo. “It's called the Brighton.”

“The company that makes the low wattage air conditioner for the Happier Camper may have some ideas for the Brighton,” said Thorin.

“The Brighton would make a beautiful office,” said Bilbo.

“Decorated with traditional furniture available on the Walmart site,” said Thorin. “Have you found any furniture pieces that would be suited for the Brighton?”

“I've started collecting photos of furniture from the Walmart site,” said Bilbo.

“What can you tell me about the animal feeders?” asked Thorin.

“I can tell you animal feeding includes birds and squirrels,” said Bilbo. “Squirrels ancestors are 56 million years old which is a clue that they are a natural part of Earth.”

“So you don't approve of squirrel-proof bird feeders?” asked Thorin.

“You can dowse that question,” said Bilbo. “The answer will be a big ‘No.’”

“Squirrels must require a particular type of feeder,” said Thorin. “They wouldn't be able to access a tube feeder.”

1  (Solidbuildwood.com) Brighton 10 x 10 garden shed, inside Area: 81.00 sq. ft. Price : $5,990.00 on sale for $3,995.00

“Only small birds can access food in tube feeders,” said Bilbo.
“Ace Hardware sells a very sturdy Shepherd hook for hanging tube feeders.”

“What tube feeder do you like?” asked Thorin.

“Wild Birds Unlimited's EcoClean® Extra Large Seed Tube Feeder has a removeable base for cleaning,” said Bilbo.

“What bird seed is suited for the tube feeders?” asked Thorin.

“Farm and Fleet's brand of bird seed is a mixture of millet and Black Oil Sunflower seeds is a favorite,” said Bilbo.

“What type of feeder is appropriate for larger birds?” asked Thorin.

“Pricefalls.com sells a Gardman Wild Bird Ground Feeder Tray,” said Bilbo.

“Squirrels can easily access that feeder,” said Thorin.

“Ground feeders are definitely squirrel friendly,” said Bilbo.

“Squirrels also like dried corn cobs that they can access on a corn cob holder.”

“A corn cob holder?” asked Thorin.

---

2 (Wild Birds Unlimited) WBU EcoClean® Extra Large Seed Tube Feeder (3493), $102.99
3 (Acehardware.com) Pancea® 65 in Single Shepherd Hook (89031), $15.99
4 (Acehardware.com) Pancea® 85 in Single Shepherd Hook (89031), $18.99
5 (Farmandfleet.com) Blain's Farm & Fleet Wild Bird Food, 10, 20 and 50 lb. bags, $4.49 - 11.99 (Sale prices)
6 (Pricefalls.com) Gardman Wild Bird BA01014 Ground Feeder Tray 507620, $22.79
“A company called Backyard Boys\(^1\) makes a wooden chair holder and Red River\(^2\) sells a 40 pound bag of corn cobs on eBay,” said Bilbo. “The holder has an upright nail for holding a corn cob in place.”

“Don't squirrels love peanuts in the shell?” asked Thorin.

“They do,” said Bilbo. “I found a company that sells a large bag\(^3\) of peanuts on eBay.”

“What about water?” asked Thorin.

“They need Spring water with 2 drops of Thyme Extract\(^4\) to kill parasites,” said Bilbo. “I found a solar powered fountain\(^5\).”

“And cleaning?” asked Thorin.

“I dowse that the fountains need to be cleaned once-a-week—the same as the chicken coops,” said Bilbo. “The tube feeders need to be cleaned once every three months.”

“Would the feeders need to be collected and cleaned in a central location?” asked Thorin.

“The task would require an electric utility vehicle,” said Bilbo.

“Which one?” asked Thorin.

“The Carryall 300 electric utility vehicle\(^6\) made by Club Car,” said Bilbo.

\(^1\) (Amazon) Backyard Boys Woodworking BBW1 Squirrel Chair Feeder, $28.08
\(^2\) (eBay) Red River Commodties P 298745 Corn on The COB 40 LB, $33.56
\(^3\) (eBay) ALPINE INGREDIENTS Inshell Peanuts- 114126 WILD BIRD SEED 16” x 5” x 30” NEW, $48.27 (Free Shipping)
\(^4\) (Vitaminshoppe.com) Eclectic Institute Thyme Extract (1 ounce liquid), $10.99
\(^5\) (Amazon) Sunnydaze Ceramic Solar Frog Outdoor Water Fountain, 7 Inch Tall, Includes Solar Pump and Panel, $84.95
\(^6\) (Jeffrey Allen, Davie, FL) Club Car Electric Utility Vehicle, “Carryall 300”
“Rubber gloves and brushes\(^1,2\)?” asked Thorin.

“Yes,” said Bilbo. “The long handled sponge brush\(^3\) for cleaning coffee air pots would probably be suited for cleaning a tube feeder.”

“Have you figured out a location for cleaning?” asked Thorin.

“I found an outdoor sink\(^4\),” said Bilbo.

“How does it work?” asked Thorin.

“The sink uses a garden hose that hooks to an outdoor spigot,” said Bilbo. “It would need to be located near a drain.”

“What about soap?” asked Thorin.

“Pears soap is environmentally friendly,” said Bilbo. “The bar needs to be dried so it does not get gooey. We talked about that.”

“So they'll need to store the bar wrapped in a wash cloth with a hair elastic,” said Thorin.

“They'll need to remember to add two new drops of Thyme Extract to the water after they clean the fountains,” said Bilbo. “It would be a good idea to dows the question, ‘Is this ok?’ when they're done. I try to do that for every task I'm working on. They'll want to get it correct.”

“Should the chicken coops be wheeled near the outdoor sink to be cleaned?” asked Thorin.

---

1. (Esafetysupplies.com) Radnor Yellow 12” Textured Palm Natural Latex Glove, $.84
2. (Walmart) DQB Industries 20” Utility Pot Scrub Brush, $7.94
4. (Generalsuperstore.com) Portable outdoor sink, $279
5. (Lowes) NeverKink 5/8-in x 100-ft Premium-Duty Kink Free Garden Hose, $56.99
“The chicken coop will require a drain to use a high pressure nozzle with a garden hose,” said Bilbo. “The drain and spigot may, or may not be near an outdoor sink.”

“Does Omlet provide instructions on how to clean a chicken coop?” asked Thorin.

“They've created a YouTube video that shows how to clean an Omlet Cube,” said Bilbo. “The video shows bedding made from hemp, but I've dowsed pine shavings from Chewy.com.”

“Can you give a chicken a bath?” asked Thorin.

“Omlet has also created step-by-step instructions for giving a chicken a bath,” said Bilbo.

“Is Pears soap the right soap for that task?” asked Thorin.

“Yes,” said Bilbo. “The instructions mention baby shampoo, or poultry shampoo, but I dowse Pears. The instructions also mention using a toothbrush to remove dirt on the chicken's feet and a hair dryer to dry them.”

“Did you dowse a ‘Yes’ on both of those instructions?” asked Thorin.

“I dowse a ‘Yes/No’ for the toothbrush which means ‘Possibly,’” said Bilbo. For the hair dryer, I dowse a ‘No.’

2. (YouTube) How long does it take to clean the New Eglu Cube? https://www.youtube.com/watch?v=8AjlQyicTQ
3. (Omlet) How to Wash and Dry Your Chicken https://www.omlet.co.uk/guide/chickens/chicken_care/cleaning/
4. (Chewy.com) Living World Pine Shavings Small Animal Bedding, Size 41-L, $8.39
Bilbo and Thorin have resumed their discussion about the Walmart and Tradewinds projects. They're just about to start a talk about coffee shops and classrooms.

“So you want to introduce nutritionally dense food at coffee shops in both locations?” asked Thorin.

“Coffee shops are perfect for introducing a menu that emphasizes eggs and dairy dishes,” said Bilbo.

“What about plants from the Permaculture Garden that are important for humans?” asked Thorin.

“There are six,” said Bilbo. “The plants are one of the reasons for the classrooms.”

“What are the six plants suited for humans?” asked Thorin.

“Rhubarb, Figs, Grapes, Katuk, Peanut and Italian Dandelion,” said Bilbo. “I've created a chart that describes the nutrition in all of the Permaculture Garden plants.”

1 Nutrition, Permaculture Garden Plants
http://housing.x10host.com/nutrition_permaculture_garden_plants.pdf
“What is Katuk?” asked Thorin.

“It's a nutrient-dense leaf vegetable that can only be grown in the tropics,” said Bilbo. “It has a peanut flavor and it's very popular in Asia.”

“I noticed cranberry is on the list of plants,” said Thorin. “I thought a bog is needed to grow cranberries.”

“The cranberry on the list is the high bush cranberry or *Viburnum trilobum,*” said Bilbo. “The red fruit looks like a cranberry, but it's not.”

“Which cranberry is grown in a bog?” asked Thorin.

“The cranberry you're thinking of is North America's *Vaccinium macrocarpon,*” said Bilbo. “In Britain and the Netherlands, it's the *Vaccinium oxycoccos.* Cranberries were once grown in bogs which are a form of wetland. Today's cranberries are grown in beds that are constructed. They need a lot of water and are often wet-picked which means the beds are flooded.”

“Now I understand why the cranberry is not in the group for human consumption,” said Thorin.

“The fruit is safe for human consumption, but it's mostly for birds,” said Bilbo.

“Will the high bush cranberry need a lot of water?” asked Thorin.

“They'll need an average amount of water,” said Bilbo. “The *Viburnum trilobum* is hardy.”

“Won't the plants need to be grown on a larger scale?” asked Thorin.

“The Permaculture Garden is a visitor introduction,” said Bilbo. “Food served in the coffee shops would need to come from commercial production.”

“Hens eat from the garden, and at a future date, dairy goats,” said Thorin. “I know you're itching to get those goats.”
“You’re right about that,” said Bilbo. “One Permaculture Garden can support twelve hens and four goats.”

“I know the emphasis on eggs and dairy dishes is due to a need to reach daily protein requirements with foods that are efficient,” said Thorin.

“Most people don't understand that there is a daily protein requirement,” said Bilbo. “It's almost impossible to reach daily required totals without eggs and dairy.”

“What happens if you don't reach your daily total?” asked Thorin.

“Muscle is made of protein, so is hair,” said Bilbo. “Protein is also required to build new bone.”

“I know you've said eggs contain ninety percent usable protein and dairy contains seventy-six percent,” said Thorin.

“Meat, fish and poultry are only fifteen to twenty percent usable,” said Bilbo.

“I see…” said Thorin.

“And, plant protein is not even as efficient as meat, fish and poultry,” said Bilbo.

“Vegetarianism could be a conspiracy,” said Thorin.

“One of many,” said Bilbo.

“Doctors don't study nutrition in medical school,” said Thorin.

“It's been a subject for self-study and it's complex,” said Bilbo.

“Another reason why we need those classrooms,” said Thorin.

---

1 For goat info, see: BCC Next Step Projects at http://crashlanding.x10host.com.

“The coffee shop and classrooms can also be used for tastings,” said Bilbo.

“Is a tasting a contest?” asked Thorin.

“A tasting is a taste test,” said Bilbo. “Visitors will be asked to give scores to the best sourdough bread, the best organic coffee, or the best nutrient-dense snack. The idea is modeled after a sourdough bread tasting in San Francisco\(^1\). The breads were marked by number and the tasters were asked to give scores, from 1 to 10, on:

- quality of the crust
- quality of the internal crumb
- aroma
- overall quality of the loaf”

“Tastings would help determine favorite foods,” said Thorin.

“I think the favorites will always be the best tasting,” said Bilbo. “And, the best tasting food requires nutrient-dense soil.”

“Another reason for the classrooms,” said Thorin.

\(^1\) “Taste Test: The Best Sourdough Bread in San Francisco,”
Bilbo and Thorin switch gears and begin a conversation about food purchasing. Even though they have discussed the details of menu choices and food preparation for the housing co-op, they realize that they've skipped over purchasing. They also realize food choices and food preparation for a coffee shop would involve a learning curve.

“Where do you think we should start our discussion about food purchasing?” asked Thorin.

“Freezers offer a safety net if we make mistakes on quantities,” said Bilbo.

“Which menu items are made with frozen food?” asked Thorin.

“Pizza followed by a dairy dessert,” said Bilbo. “There's also the Food for Life sprouted grain bread and ice cream. Bread is only a component of a couple menu items and ice cream is a dessert and a snack.”

“So pizza and a dairy dessert are the only real safety net,” said Thorin. “A BIG freezer space would ensure the safety net works.”

“I agree,” said Bilbo.

“During your research, have you found any BIG freezers?” asked Thorin.
“I came across a company called Polar King International that sells seamless fiberglass walk-in coolers and freezers,” said Bilbo. “They sell freezers for indoor or outdoor applications as well as freezer vans.”

“It sounds like they have a variety of sizes,” asked Thorin.

“The temperature range is -20 degrees Fahrenheit which is the temperature that Hulda Clark said kills parasites as long as the food is frozen for a minimum of 24 hours,” said Bilbo.

“I know how particular you are,” said Thorin. “Have you determined how to source food choices that you like?”

“Publix managers say they will sell bulk orders if they have two or three days notice,” said Bilbo. “There are four choices of pizza at Publix. I also measured the containers to determine cooler size:”

- GreenWise 10.5 in. X 10.5 in.
- Amy’s 10 in. X 10 in.
- Newman’s Own 11.75 in. X 11.75 in.
- Monteli Organic 11 2/8th in. X 11 2/8th in.

“And the cheesecake?” asked Thorin.

“Publix, Target, Walmart and Winn Dixie sell a 2-slice box of New York Cheesecake made by Edwards,” said Bilbo.

“Weren’t you planning to order cheesecake from Cheesecake.com?” asked Thorin.

“That’s still a plan,” said Bilbo. “We should probably plan one of those tastings before you fill one of those fiberglass freezers,” said Thorin.

“Good idea,” said Bilbo.

1 (Polarking.com) Seamless fiberglass walk-in freezers and coolers.
“We may also need one of those freezer vans, unless we can arrange delivery,” said Thorin.

“I agree,” said Bilbo.

“Are you planning to ask Publix about wholesale pricing?” asked Thorin.

“Their retail prices are reasonable,” said Bilbo. “I've discovered Publix pricing that is lower than wholesale.

“You mentioned that Amazon bought Whole Foods,” said Thorin. “The Amazon discount is as much as 70%.”

A Walmart manager said if I supply a UPC code, they would check to see if the product can be ordered,” said Bilbo.

“What is a UPC code?” asked Thorin.

“It stands for Universal Product Code. The code is a 12 digit number that's printed along the bar code.” said Bilbo.

“It sounds like menu items will require pricing research and practice when it comes to ordering quantities,” said Thorin.

“And if we make a mistake, we'll break out the pizza and cheesecake,” said Bilbo.
Bilbo and Thorin feel they need to brainstorm an easy approach to opening a coffee shop because neither one of them has any experience. They are discussing possible steps for starting small and expanding gradually.

“Fortunately, the housing co-op has a sizable number of people,” said Thorin.

“I thought about that,” said Bilbo.

“For example, we'll need to learn how to use a Bunn Axiom APS Twin Airpot Coffee Brewer,” said Thorin. “We don't have a choice.”

“Maybe we could start with our safety net foods and coffee,” said Bilbo.

“I think that would work,” said Thorin.

“The fiberglass walk-in freezer will help,” said Bilbo.

“Would it make sense to start with a small coffee shop?” asked Thorin.

“The coffee shop and classrooms will be in the same building and, as we've discussed, we desperately need classes,” said Bilbo.
“So, we'll need to rely on the safety net foods until we're ready to add other menu items,” said Thorin.

“Food prep for a housing co-op meal is actually harder than short orders in a coffee shop,” said Bilbo. “The housing co-op group is a lot larger and everyone eats at the same time.”

“That's the reason for the long line-up of toaster ovens and hot plates,” said Thorin.

“We'll need that approach when we start holding classes,” said Bilbo.

“Housing co-op residents will be learning the ropes because they share tasks,” said Thorin.

“So, when a coffee shop is quiet, anyone who's worked in the housing co-op shared dining area, can work part-time,” said Bilbo.

“The coffee shop will need to add staff at peak hours,” said Thorin.

“I think the rest may be sales checks and bookkeeping,” said Bilbo.

“And if we make a mistake on ordering food supplies, we'll say we're out of everything except pizza and cheesecake,” said Thorin.

“And coffee,” said Bilbo.

“Do you think we could make a mistake on coffee?” asked Thorin.

“We could run out of cream,” said Bilbo.

“Maybe we should make sure we have plenty of practice with pizza, cheesecake and coffee before we add any other menu items,” said Thorin.

“I agree,” said Bilbo.
After a lunch break, Bilbo and Thorin have started talking about a museum as well as “Made in America” showrooms that are both aspects of the Walmart project.

“I think a presentation hall would be better than a museum,” said Thorin.

“A museum could include a presentation hall,” said Bilbo.

“Doesn't a Middle Earth museum belong in Europe?” asked Thorin.

“The fans are all over the world,” said Bilbo. “J.R.R. Tolkien ranked number three on the Forbes list of ‘Top Earning Deceased Celebrities’ in 2010.”

“Who were number one and number two?” asked Thorin.

“Michael Jackson and Elvis,” said Bilbo.

“Are there any other Middle Earth museums?” asked Thorin.

“There are museums in Switzerland and New Zealand,” said Bilbo.

“I suppose a museum would help maintain a focus,” said Thorin.

“And a presentation hall would be useful for special events,” said Bilbo.
“What about the Made in America showrooms?” asked Thorin.

“The showrooms would help consumers and wholesale buyers understand what is available,” said Bilbo. “So little is made in America that is a hard subject to research.”

“Would it be hard to fill showrooms?” asked Thorin.

“It would be challenging,” said Bilbo. “I've been making lists.”

“What products are on your lists?” asked Thorin.

“Here are my categories,” said Bilbo showing Thorin his lists:

- Clothing
  - Optical
- Furniture
  - Commercial Furniture
- Kitchen - Dining
- Building Materials
  - Flooring

1 (Clothing) http://housing.x10host.com/bay_colony_club_retail_clothing_usa_ver_large.pdf
2 (Optical) http://housing.x10host.com/bay_colony_club_optical_usa_large.pdf
3 (Furniture) http://housing.x10host.com/bay_colony_club_floorplan_usa_ver_large.pdf
4 (Commercial Furniture) http://housing.x10host.com/bay_colony_club_furniture_usa_large.pdf
5 (Kitchen-Dining) http://housing.x10host.com/bay_colony_club_china_usa_large.pdf
6 (Building Materials) http://housing.x10host.com/bay_colony_club_building_materials_usa_large.pdf
7 (Flooring) http://housing.x10host.com/bay_colony_club_floor_usa_large.pdf
“Does Walmart sell products Made in America?” asked Thorin.

“They recently announced a campaign to purchase an additional $250 billion in products made, sourced or grown in the U.S. by 2023,” said Bilbo.

“The Made in American campaign is not due to protectionism is it?” asked Thorin.

“Job loss is due to automation,” said Bilbo.

“Jobs in manufacturing become obsolete with technological change,” said Thorin.

“Robotics,” said Bilbo. “Pulling manufacturing back to U.S. soil will not end large scale unemployment.”

“Is there a cure for the jobs lost?” asked Thorin.

“Roosevelt had to use the Works Progress Administration in 1935 to end the depression,” said Bilbo. “Millions of unskilled people were hired. Part of the WPA project employed musicians, artists, writers, actors and directors in large arts, drama, media, and literacy projects.”

“I think we need to re-boot the WPA,” said Thorin.

“We need to integrate unskilled people in private and public projects,” said Bilbo.

“The skilled and the unskilled are eating almost all the wrong foods,” said Thorin. “We might as well launch projects that create jobs and education at the same time.”

“Knowledge transfer,” said Bilbo.

---

1 “Most US manufacturing jobs lost to technology, not trade” by: Federica Cocco, December 2, 2016
https://www.ft.com/content/dec677c0-b7e6-11e6-ba85-95d1533d9a62
“I bet you never even put anything in your mouth unless it contains nutrients,” said Thorin. “I know you choose foods for their nutritional value.”

“I try not to,” said Bilbo. “That would lead to physical decline. Do I need to reaper my Hostess Twinkie story?”

“I remember your Twinkie story,” said Thorin.

“We've been talking about the skilled and unskilled,” said Bilbo. “Watch what people put in their shopping baskets. It's a shock.”

“Whose responsibility is it if people put low-quality food in their mouth?” asked Thorin.

“Several people and groups need to share the responsibility,” said Bilbo. “Most people do not know the difference between a protein and a carbohydrate. We need lots of training, or we're in trouble.”
Throughout their discussions, Bilbo has been taking notes each time Thorin asks a question. He realizes that if Thorin is fuzzy on a topic, others will be also. The subject has just moved to the Biochar Trial on Bilbo's Tradewinds chart.

“I think we can move on to the subject of biochar,” said Thorin. “What is it?”

“It's an ancient technique used in agriculture,” said Bilbo.

“Does ‘char’ stand for charcoal?” asked Thorin.

“Almost 5,000 years ago a Chinese emperor named Shen-Nong taught the people of his kingdom how to farm using a slash-and-burn technique for clearing the land—leaving the ground rich in nitrogen, phosphorus, potassium and calcium,” said Bilbo.

“So it refers to burning,” said Thorin.

“Shen-Nong referred to himself as the “Lord of the Burning Wind,” said Bilbo.

“So you want to hold a ‘biochar’ trial to prove that it works?” asked Thorin.

“It's so simple, it seems impossible,” said Bilbo.

“Is it in use anywhere on the planet?” asked Thorin.
“I've seen pictures of slash and burn on agricultural fields in Italy,” said Bilbo. “There's also the Terra Preta in the Amazon.”

“Terra Preta?” asked Thorin.

“Author Charles C. Mann mentions Terra Preta in his book *1491,*” said Bilbo. “It's in the book excerpt¹ that was published in *The Atlantic Monthly* in 2002. It's rich, fertile ‘black earth’ that anthropologists believe was engineered by human beings.”

“So why hasn't it been revived?” asked Thorin.

“Cornell University soil scientists are working on it,” said Bilbo. “They believe it is a process that involves a slow burn.”

“Why Tradewinds?” asked Thorin.

“I dowse that a biochar trial would produce more fertile soil in a wooded area,” said Bilbo. “A trial would also be safer in the tropics.”

“Did you dowse a location?” asked Thorin.

“I dowse a requirement for a 600 foot by 600 foot area,” said Bilbo. “I also dowsed an approximate location on a Tradewinds map and then worked out approximate GPS locations using Google Maps.

“You could measure four 300 foot squares with tape measurement, but that area is not flat,” said Thorin.

“Trees would be in the way,” said Bilbo.

“Would a handheld GPS receiver help you mark the locations in the park?” asked Thorin.

“A starter GPS receiver for geocachers would do just fine,” said Bilbo.

¹ “1491” by: Charles C. Mann, March 2002
“Which one do you like?” asked Thorin.

“Reviewers say that the $87 Garmin eTrex 10 Worldwide Hand-held GPS Navigator performs well in tracking accuracy tests,” said Bilbo.

“What would you use to mark the locations?” asked Thorin.

“Athletic Aerosol Turf Paint that can be sprayed in cans held upside down,” said Bilbo. “There are several colors available. The white is the only one that is water-based.”

“Won't you need a fire barrier?” asked Thorin.

“Trees will need to be cleared for a 6-foot wide gravel path around the perimeter,” said Bilbo. “Trees will also need to be cleared an additional 6 feet around the perimeter. That will also need to be dowsed when complete.”

“Have you found any step-by-step instructions for laying a gravel path?” asked Thorin.

“Alexandra Bandon of This Old House magazine wrote a great article titled ‘How to Lay a Budget-Friendly Gravel Path,’” said Bilbo. “She says it can be done in a weekend. Of course, a path around a 600 foot by 600 foot square would take longer.”

“What about tools?” asked Thorin.

“I thought tape measures would still be helpful,” said Bilbo.

“A 25 ft. and a 300 ft.? asked Thorin.

1 (Cabelas.com) Garmin® eTrex 10 GPS Unit, $79.99 (sale price)
2 (Baseball.epicsports.com) Ameri-Stripe Athletic Aerosol Turf Paint (12 Cans) Water-based, Color: White, $34.69
“Home Depot sells the Stanley PowerLock 25 ft. Tape\(^1\) and a 300 ft. tape\(^2\),” said Bilbo.

“What about shovels?” asked Thorin.

“Home Depot sells Ames\(^3\) and Fiskars\(^4\) shovels as well as a Razor-Back steel tamper\(^5\),” said Bilbo.

“What is a steel tamper?” asked Thorin.

“Tampering refers to material compaction,” said Bilbo. “In this case, it's for compacting the soil. You may have seen a small, handheld tamper used to compress ground coffee into a puck to prepare espresso at coffee bars.”

“Will you need electric utility vehicles?” asked Thorin.

“Electric utility vehicles and small utility carts that the vehicles can pull,” said Bilbo. “The Carryall 300 electric utility vehicle\(^6\) made by Club Car has a 2 inch trailer hitch. Strongway\(^7\) makes a garden wagon with a 1,200 pound capacity. I also found two mount kits\(^8\)\(^9\) for attaching the wagons to the electric utility vehicles.

---

1. (HomeDepot) Stanley PowerLock 25 ft. Tape Measure, $9.88
2. (HomeDepot) Stanley 300 ft. Tape Measure, $25.46.
3. (HomeDepot) Ames 24.5 in. D-Handle Aluminum Scoop, $32.97
4. (Home Depot) Fiskars 47 in. Garden Spade Shovel, $28.83
5. (Home Depot) Razor-Back 10 in. x 10 in. Steel Tamper $29.97
7. (Northerntool.com) Strongway Poly Garden Wagon 1200 lb capacity 39 in (L) X 25 in (W), $134.99
8. (Carid.com) CURT® 45821 - 3-in-1 ATV Multi Use Ball Mount for 2” Receivers, $46.91
9. (Etrailer.com) Rapid Hitch Adjustable Aluminum Ball Mount Kit - 2 Zinc Balls - 5-1/2” Drop, 6-1/2” Rise, $179.99
“Does Club Car make a passenger electric vehicle?” asked Thorin.

“Polaris makes electric passenger vehicles that are more advanced,” said Bilbo. “They're called low speed vehicles\(^1\) or LSVs and they're street legal.”

“What do you know about Polaris?” asked Thorin.

“They're a Minnesota-based manufacturer of snowmobiles, all-terrain vehicles, or ATVs, and motorcycles\(^2\),” said Bilbo. “The all-terrain and snowmobile engines were developed and supplied by Subaru.”

“What about the electric vehicles?” asked Thorin.

“They were developed by a group of ex-General Motors engineers,” said Bilbo. “The company was called Global Electric Motorcars, or GEM. DaimlerChrysler bought the company in 2000 and then Polaris made their purchase in 2011.”

“Subaru's Australian Web site explains that the name refers to a cluster of six stars in the Pleiades constellation that respresent the seven daughters of Atlas and Pleione.” said Thorin. “The Subaru logo has six stars representing the six that are visible to the naked eye.”

---

1. “Driving Street-Legal Low Speed Vehicles (LSVs) in Ft. Lauderdale and Pompano Beach, Florida” by: Mary Jo Fahey, August 1, 2017
   http://housing.x10host.com/low_speed_vehicle_08_01_17.pdf

2. Indian Motorcycle of Miami, 3850 S. Dixie Hwy., Miami, FL 33133, 305-448-2989, subsidiary of Polaris that sells GEM LSVs,
   http://www.indianmotorcycleofmiami.com/index-gem.asp

3. Subaru Australia,
“There are features in the GEM vehicles I have not seen in other models,” said Bilbo. “GEM vehicles have an extensive number of accessories available including doors, heaters and a solar panel for the roof.”

“What does an electric vehicle cost to operate?” asked Thorin.

“Three cents a mile,” said Bilbo.

“Less costly and no carbon emissions,” said Thorin.

“Electricity is still harmful if it's generated from fossil fuels,” said Bilbo.

“We need safe, clean energy,” said Thorin.

“In Florida, electricity is generated from natural gas,” said Bilbo. “Natural gas is used to make synthetic fertilizer which is the reason we need a biochar trial.”

“You must be talking about the excess nitrogen in synthetic fertilizer that creates algal blooms,” said Thorin. “The algal blooms give off nitrous oxide.”

“That's correct,” said Bilbo. “Synthetic fertilizer is repsonsible for Dead Zones and nitrous oxide is a greenhouse gas 300 times more potent than carbon. Florida is already facing rising sea levels that are serious. Miami Beach recently spent 400 million dollars on mechanical pumps.”

“Where are the Dead Zones?” asked Thorin.

“The Gulf of Mexico and Florida Bay,” said Bilbo. “Dan Charles, National Public Radio's Food and Agriculture correspondent, recently reported that the Gulf of Mexico's Dead Zone is the biggest ever seen. He says it's due to pollution from farms.”

---

1 “The Gulf Of Mexico's Dead Zone Is The Biggest Ever Seen” by: Dan Charles, August 3, 2017
   www.npr.org/sections/thesalt/2017/08/03/541222717/the-gulf-of-mexicos-dead-zone-is-the-biggest-ever-seen
“Where is Florida Bay?” asked Thorin.

“Florida Bay is located at the tip of Florida between the mainland and the Keys,” said Bilbo. “Chesapeake Bay is a famous Dead Zone. There are also Dead Zones all along the coast of California.”

“Synthetic fertilizer grew out of munitions manufacturing after World War II,” said Thorin. “We're talking about guns, drugs and oil.”


“Local governments could pass laws to make synthetic fertilizer illegal,” said Thorin.

“They may have to,” said Bilbo. “Governor Jerry Brown of California announced a Climate Action Summit, planned for San Francisco in September 2018.”

“Have you worked out any details with the County Parks Department?” asked Thorin.

“Not yet,” said Bilbo. “If they're interested in a trial, they will need the Fire Department present.”

“Slash and burn is for clearing land. If the trial leaves the soil rich in nitrogen, phosphorus, potassium and calcium, what land would you clear?” asked Thorin.

“I'd clear all genetically modified crops and all citrus,” said Bilbo.

“I understand why you would clear GMOs, but why citrus?” asked Thorin.

“Citrus fruit has a strong alkaline effect on the body,” said Bilbo.

“And that's bad?” asked Thorin.

“Foods that have an alkaline effect leave minerals behind that form bases,” said Bilbo.

“I don't understand,” said Thorin.

“We're talking about pH,” said Bilbo.
“I'm not familiar with pH,” said Thorin. “I remember you mentioned Pears was a pH neutral soap, but that's as much as I know.”

“pH is a measure of hydrogen ion concentration,” said Bilbo, “It's used to measure acidity or alkalinity of a solution.”

“I still don't understand,” said Thorin.

“Another reasons we need classrooms,” said Bilbo.

“To learn chemistry?” asked Thorin.

“And some physics,” said Bilbo. “The two subject overlap.”

“Are you going to leave me in the dark?” asked Thorin.

“Have you ever used jumper cables on your car?” asked Bilbo.

“A couple of times,” said Thorin.

“Do you remember how you connected the cables?” asked Bilbo.

“The red cable connects the positive poles of the two batteries and the other cable, usually black, connects the negative poles,” said Thorin.

“That's physics,” said Bilbo.

“And, electrons flow from the negative pole to the positive pole,” said Thorin.

“That's correct,” said Bilbo. “Electrons have a negative charge and they're attracted to the positive pole.”

“Are electrons equivalent to hydrogen ions?” asked Thorin.

“They're different,” said Bilbo. “Hydrogen ions have a positive charge.”

“So where do physics and chemistry overlap?” asked Thorin.

“In chemistry, pH paper is red when dipped in an acid and blue if it's dipped in a base which is alkaline,” said Bilbo.

“Are you saying acids have more hydrogen ions?” asked Thorin.

“That's correct,” said Bilbo. “And, hydrogen ions provide energy.”
“Doesn't citrus contain citric acid?” asked Thorin.

“Remember, we said problem foods leave minerals behind that form bases,” said Bilbo.

“Are you saying that foods that form bases cause a shortage of hydrogen ions?” asked Thorin.

“That's correct,” said Bilbo. “Your body needs hydrogen ions for energy in metabolic pathways. And, there are hundreds of pathways.”

“What are the bases that get left behind?” asked Thorin.

“The magnesium in citrus forms magnesium hydroxide, calcium forms calcium hydroxide and potassium forms potassium hydroxide,” said Bilbo.

“Are you saying those minerals need to be obtained in foods that are acid forming instead of alkaline forming?” asked Thorin.

“Yes,” said Bilbo. “Acid forming foods supply hydrogen ions that body needs.”

“So, everyone needs to learn which foods are alkaline forming and which ones are acid forming,” said Thorin.

“Here is a list1 that will help. I'll start with the alkaline forming foods,” said Bilbo making a chart for Thorin.

- Citrus Fruit (strong alkaline forming)
- Green Vegetables (strong alkaline forming)
- Seaweed (strong alkaline forming)
- Green tea (strong alkaline forming)
- Sea Salt (medium alkaline forming)
- Coffee (medium alkaline forming)
- Wine (medium alkaline forming)
- Ginger (medium alkaline forming)

---

• Apple Cider Vinegar (strong acid forming)
• Peanut Butter (strong acid forming)
• Chocolate (strong acid forming)
• Meat (medium acid forming)
• Bread (medium acid forming)
• Eggs (medium acid forming)
• Black Tea (medium acid forming)
• Milk and Cheese (weak acid forming)

“I know you eat some vegetables including seaweed,” said Thorin. “I also know you use sea salt¹ and you drink coffee.”

“I only eat green vegetables if they are high in minerals,” said Bilbo.

“Can you give me an example?” asked Thorin.

“Dandelion greens,” said Bilbo. “They're high in iron, calcium, Vitamins A, C, K and B2. They also contain folate that is needed in the Vitamin B12 metabolism.”

“That's it?” asked Thorin.

“You asked for an example,” said Bilbo. “Broccoli is an important vegetable because it's high in calcium and folate.”

“What about all the other vegetables?” asked Thorin.

“If we had better soil, vegetables would contain more nutrients,” said Bilbo. “Cucumbers are supposed to be high in selenium, but the soil would need to contain selenium. Zinc is another mineral we need. It's used in hundreds of metabolic pathways.”

“Is that why we need selenium?” asked Thorin. “For the metabolic pathways?”

¹ "Gray is a Good Color for Salt," by Mary Jo Fahey, April 2010
http://articles.x10.mx/disease.html
“Selenium plays a role in thyroid metabolism,” said Bilbo. “It's used to make an enzyme that's critical for helping the thyroid to use iodine.”

“That means we also need iodine. There's iodine in seaweed and it probably also contains selenium,” said Thorin. “Can seaweed be used on the soil?”

“Alternative farmers use a lot of seaweed to remineralize soil,” said Bilbo.

“There isn't enough seaweed for everyone,” said Thorin. “Unless seaweed is intentionally grown and harvested.”

“Larch Hanson is a seaweed farmer in Maine,” said Bilbo. “Most of the seaweed he grows is for food, but some is for agriculture.”

“Slash and burn leaves the soil rich in nitrogen, phosphorus, potassium and calcium,” said Thorin. “And, there other minerals needed.”

“We talked about dolomite,” said Bilbo.

“I remember you said a French scientist named C. Louis Kervran wrote a book called Biological Transmutation,” said Thorin. Kervran explains that calcium is transmuted into other minerals


“If you slash and burn, would you also need dolomite?” asked Thorin.

“That would be a situation to dowse,” said Bilbo.

“Health conscious people are buying Vitamins because the soil does not contain enough nutrients ,” said Thorin.

1 "Maine Seaweed, LLC -https://theseaweedman.com
“Most Vitamins contain single nutrients,” said Bilbo. “Metabolic pathways need supplemental nutrients that are called co-factors. The co-factors we need are found in food.”

“Someday, if I eat a cucumber that was grown on rich soil with plenty of selenium, it would still be alkaline forming,” said Thorin.

“Fermentation helps,” said Bilbo. “Traditional societies ferment vegetables. The best fermented foods contain lactic acid that has not been killed off with pasteurization.”

“Seaweed and sea salt contains minerals,” said Thorin. “How do you explain the coffee you drink?”

“I admit, I drink coffee as a pleasant-tasting pick-me-up,” said Bilbo. “Black tea works if I need a little pick-me-up, but coffee works best if I need a big pick-me-up. It took me thirty years to understand pH chemistry in food. I drink less coffee now that I understand that it's medium alkaline forming.”

“So the Permaculture Garden plants are all nutrient dense?” asked Thorin.

“The plants are naturally high in nutrition and rich soil will help,” said Bilbo. “Healthy plants also repel pests.”

“Are pests in the soil?” asked Thorin.

“Earth is full of nematodes that cause diseases in plants, animals and humans,” said Bilbo. “Biologist E.O. Wilson talked about nematodes at a TED conference in 2007. He said four out of five animals on Earth are nematode worms. If all solid materials except nematodes were to be eliminated, you could still see the ghostly outline of of most of it in nematode worms.”

---

1 “Nutrition, Permaculture Garden Plants” by: Mary Jo Fahey, 1/16, http://housing.x10host.com/nutrition_permaculture_garden_plants.pdf
“Do farmers know their crops are infected?” asked Thorin.

“Most farmers are in the dark about nematode infections,” said Bilbo. “Academic researchers are following the problem. There’s a professor and researcher named Greg Tylka with the Department of Plant Pathology at Iowa State University who specializes in nematodes that infect soybeans.”

“If farmers are in the dark, the infection must be growing” said Thorin.

“Greg's department has produced an impressive animation that shows the growth of the nematode infection in soybeans from 1954 to 2014,” said Bilbo.

“The problem could not be contained with a pesticide?” asked Thorin.

“Aldicarb, a pesticide used to kill nematodes, poisoned several people on the 4th of July in 1985.” said Bilbo. “The EPA began a phase-out in 2010.”

“That's 25 years!” said Thorin.

“The problem is growing because nematodes reproduce in as few as three and a half days. They lay hundreds of eggs that are microscopic.”

“If there is so little nutrient rich soil, how do you know healthy plants repel pests?” asked Thorin.

1 "Scientists Who Say Parasites Thrive in Alkalinity" by Mary Jo Fahey, November 2013
   http://articles.x10.mx/parasites_alkalinity.html

2 Distribution of the soybean cyst nematode in the United States and Canada from 1954 to 2014.
“There's a great grasshopper story on the Weston A. Price Foundation Web site that illustrates what happens when plants are healthy,” said Bilbo.

“Are you going to tell me the story?” asked Thorin.

“Yes,” said Bilbo. “I'll tell you the story. Just in case you ever want to read it yourself, the grasshopper story is in the article about brix¹.”

“Brix?” asked Thorin.

“Nutrient dense food is high brix,” said Bilbo.

“That does not really help me understand the word brix” said Thorin.

“Professor Adolf Ferdinand Wenceslaus Brix was a nineteenth century German mathematician and engineer who invented a device called a brix meter,” said Bilbo.

“What does it do?” asked Thorin.

“It measures solute density in any liquid,” said Bilbo. “He invented it to select the very best grapes to make the very best wine.”

“How does it work?” asked Thorin.

“It's an optical device that uses the refraction of light,” said Bilbo. “It has a prism that you paint with the juice of any fruit or vegetable. When you point it at a light source and look through the eyepiece, a number can be read along a scale that's displayed.”

¹ "The Quest for Nutrient-Dense Food: High-Brix Farming and Gardening " By Suze Fisher, March 2005

² "Is Disease Due to Neglect?” by Mary Jo Fahey, November 2013
http://articles.x10.mx/disease.html

² Menu Grid for housing co-ops and coffee shops (dowsed), 4/16
http://crashlanding.x10host.com/bay_colony_menus.pdf
“Who uses brix meters?” asked Thorin.

“Farmers and produce managers,” said Bilbo. “Brix meters are also used in scientific research.”

“Did professor Brix use the meter to measure brix values of other foods?” asked Thorin.

“No,” said Bilbo. “In the 1930s, a soil scientist named Carey Reams created a chart of optimal brix values for other foods. His work has been preserved by a consultancy in Minnesota called International Ag Labs. The company has a Web site called High Brix Gardens that has a free PDF of Carey Reams' numbers.”

“Where are brix meters sold?” asked Thorin.

“They are available on eBay were they're called refractometers,” said Bilbo. “They're manufactured in China and the really cheap models may be defective. The selection should be dowsed.”

“Do you think everyone should own a brix meter?” asked Thorin.

“I think so,” said Bilbo. “Most farmers would say, ‘no.’ They would not want the public to know how few nutrients there are in food. The white of an egg should also be brixed.”

“We have not talked about the grasshoppers,” said Thorin.

“The story took place on land that belonged to two neighboring farmers,” said Bilbo. “They had opposite farming practices. One was conventional and the other took care of his soil and raised high-brix crops. In 2003, there was a grasshopper infestation and the grasshoppers did not bother the high-brix plants.”

---

1 High Brix Gardens
A project of International Ag Labs that has preserved the work of Carey Reams
https://www.highbrixgardens.com

2 (eBay.com) Refractometer example: Beer Brewing Refractometer 0-32% Brix
Wort Specific Gravity Juice Wine Sugar Test
“How did the farmers know which farm the grasshoppers preferred?” asked Thorin.

“Rodney, the farmer with the high-brix crops, told the story,” said Bilbo. “He said whoever walked into the grasshopper infested field would be covered with grasshoppers. The grasshoppers would jump off if they walked into the high-brix field. They tested it several times.”

“That’s a great story,” said Thorin.

“Here’s the problem,” said Bilbo. “According to Rex Harrill, only five percent of the food in this country is high-brix.”

“Who is Rex Harrill?” asked Thorin.

“He’s the brix specialist who is interviewed in the article I mentioned,” said Bilbo. “He runs the BrixTalk group on Yahoo1.”

“So, not only is most food low-brix, it sounds like it's also infested with parasites,” said Thorin.

“Low-brix food is also tasteless,” said Bilbo.

“Most people really are putting bad food in their mouth,” said Thorin.

“The decline is causing disease,” said Bilbo. “Most disease is caused by parasites.

“Drug sales would drop off if the public knew about parasites,” said Thorin.

“Scientific studies that make connections between parasites and disease exist, but most people would never read them,” said Bilbo.

---

1 BrixTalk Group at Yahoo, https://groups.yahoo.com/neo/groups/BrixTalk/info
“You've found more than five hundred studies and cataloged citations to four hundred and eighty one,” said Thorin.

“I find scientific studies that make a connection between a parasite and a disease every time I do a search,” said Bilbo.

“Remind me how you do your searches,” said Thorin.

“You need to know scientific names of parasites and medical names of diseases,” said Bilbo. “If you know the scientific name of a parasite and the name of a disease condition that medical practitioners use, you can find related studies in the National Institute of Health's National Library of Medicine's PubMed database. I use the letters nih in searches because URLs with nih are returned.”

“It sounds like a conspiracy to me,” said Thorin.

“Or, an extermination agenda,” said Bilbo. “The parasites are genetically engineered. Search on the name of a parasite and the words genetic engineer and you'll see studies returned. Be sure to add the letters nih to the searches.”

“That's the reason for the Rife devices,” said Thorin. “If parasites reside in your body, they benefit from nutrients in the food you eat.”

“The correct frequency seems to be 40 to 42 KHz,” said Bilbo.

“How did you figure that out?” asked Thorin.

“A scientist named Hulda Clark killed parasites using a sonicator that pulsed 40 KHz of sound energy and a group of scientists who published a peer-reviewed paper used a sonicator to kill nematodes by pulsing 42 KHz of energy,” said Bilbo.

---


2 The Cure and Prevention of All Cancers, Dr. Hulda Clark, January 1, 2008.

“What is a sonicator?” asked Thorin.

“It's a device that pulses sound energy into a tank of water,” said Bilbo. “Sound energy can also be used to kill algal blooms. I found a Canadian company that manufactures a device."”

“Does the Rife device use sound?” asked Thorin.

“No,” said Bilbo. “In a Rife device, the electrical energy is delivered through leads that you hold in your hands. It's subtle energy that must travel over the body's meridians.”

“You never did explain why pH neutral soap is beneficial,” said Thorin.

“Most soap is alkaline,” said Bilbo. “It's made with lye which is the most alkaline substance on the planet.”

“What does pH neutral imply?” asked Thorin.

“The pH scale ranges from 0 to 14. A pH of 7 is neutral,” said Bilbo.

“Why is a pH of 7 desirable?” asked Thorin.

“The skin covering of the body is called an acid mantle,” said Bilbo. “It's a barrier against harmful bacteria. Acids and bases cancel each other out which means alkaline soap would neutralize the body's acid mantle.”

“Why isn't this common knowledge?” asked Thorin.

“The term acid mantle has been used since the 1920s, but the benefits have only been understood for a couple of decades,” said Bilbo.

---

1 Canadian company that makes a sound device that kills algal blooms, www.biobac.qc.ca/en/ultrasounds-control-of-algae-and-cyanobacteria/quattro-db/

2 "Are We Using the Wrong Soap?" by Mary Jo Fahey, November 2013 http://articles.x10.mx/soap.html
“Are there other benefits besides a barrier against harmful bacteria?” asked Thorin.

“Yes, there are three,” said Bilbo. “When the skin is slightly acid, there is an activation of enzymes that are responsible for creating fat or lipid molecules in the skin's outermost layer. An acid pH also allows for the creation of a critical bilayer lipid membrane that forms around skin cells and it also allows for the restoration of skin following damage.”

“Those benefits sound extremely important for maintaining youthful looking skin,” said Thorin.

“I agree,” said Bilbo. “The problem is, there are very few soaps that are pH neutral. Soap that is slightly acidic is acceptable because it does not damage the acid mantle.”

“Pears is glycerin soap,” said Thorin.

“The other pH neutral soap is called Miracle II,” said Bilbo. “It’s sold as a liquid concentrate.”

“What are the soaps that are slightly acidic?” asked Thorin.

“Goat milk soap because it contains caprylic acid and a soap called Dream Quest from a Vitamin company called Nature's Plus,” said Bilbo.

“What about shampoo?” asked Thorin.

“I dowse that shampoo is alkaline,” said Bilbo.

“What do you use?” asked Thorin.

“I use Pears to wash my hair,” said Bilbo.

“Should retailers sell the alkaline products?” asked Thorin.

“If I can dowse, they can dowse,” said Bilbo. “All retailers should dowse every product they sell. Everyone should also dowse whether their work is ok. If they dowse a ‘No,’ they should dowse whether their work, or product, can be modified.”
“There's a lot to learn,” said Thorin.

“Yes,” said Bilbo. “When I dowsed how much more there is to learn as a percent, seventy is the response.”

“That would not even be a passing grade,” said Thorin.

“The group who are putting bad food in their mouths are nowhere near a passing grade,” said Bilbo.

“How will they catch up?” asked Thorin.

“Dowsing helps,” said Bilbo.