

Functional Analysis of Elements

The Land Itself

intrinsic qualities

rocky hillside of large mountain
rainy maritime climate
temperate rainforest

needs

plant life
animal life
sun access
erosion control
drainage

natural yields

trees
shrubs
moss
small mammals
birds

Human Residents

intrinsic qualities

large bipedal mammals with
dangerously over-developed
brains
two adults, two children

inputs

water
food
shelter
stuff
companionship
community
entertainment
connection with land
connection with culture

outputs

urine
shit
physical work
mental work
creative work
community enhancement
environmental stewardship
• via legal and political means
• via household subsistence

House and Household

intrinsic qualities

1400 sqft, two story building, housing family of four

heated primarily with wood, but otherwise connected to regular city utilities

inputs

food

firewood

electricity

water

sewer

diesel

phones

internet

stuff

outputs

paper

plastic

recyclables

food waste

other trash

used household goods

Pottery Business

intrinsic

12 x 12 ft space for studio with good access to 8 x 10 ft kiln shed

inputs

clay

minerals for glazes

water

work

electricity

propane

outputs

salable pottery

broken pottery

broken bisque-ware

dry clay trimmings

clay slurry

heat

Food Producing Elements

| element | description | inputs | outputs | access |
|---------------------------------------|--|---|--|---|
| annual vegetables | small to medium sized herbaceous annual plants, some quite beautiful | at least a foot of loose rich soil seed plentiful water and good drainage full sun warmth, particularly in spring aggressive slug protection weed protection seasonal fertility amendments, particularly nitrogen | 1/2 to 2 pounds high quality vegetables per square foot poultry feed compostable materials soil loosening erosion control weed blocking beauty | kitchen- daily duck house- daily water- weekly nursery- monthly tool storage- seasonally compost bins- seasonally poultry manure- seasonally chickens-- seasonally |
| perennial vegetables and herbs | small to medium, herbaceous to woody plants, most quite attractive and many fragrant | decent soil at least 1 foot deep good drainage partial sun (many shade tolerant) warmth some slug protection minimum weed competition some protection from winter freezing yearly fertility amendments occasional pruning | small quantity of highly flavorful food soil loosening mineral mining erosion control weed blocking insectiary beauty | kitchen- daily water- occasionally mulch materials- seasonally |

| element | description | input | output | access |
|----------------------|---|--|---|--|
| berry crops | small creeping to large bush perennial plants | decent soil at least one foot deep good drainage full sun to very light shade warmth aggressive slug protection for creeping varieties year round mulch trellising or training for some varieties fertility amendments, particularly potash minimum weed competition yearly pruning | up to 1/2 pound extremely nutritious and flavorful fruit per square foot soil loosening erosion control weed blocking insectiary bird food and habitat shade from larger varieties prunings and leaves | kitchen- daily when fruiting ducks- daily for creeping varieties if protected water- occasionally fertility and mulch materials- seasonally |
| native plants | low creeping to tall bush perennial and biennial plants | 6 inches decent soil decent drainage partial to full shade tolerant original plant or cutting | biomass poultry feed human medicinals soil loosening and fertility boosting erosion and weed control insectiary bird food and habitat shade from taller varieties beauty | adjacent to annual vegetables poultry- weekly compost bins- seasonally |

| element | description | inputs | outputs | access |
|-----------------------------|--|---|---|---|
| chickens | <p>medium sized, omnivorous, forest dwelling birds, normally grouping in flocks of 20-30</p> <p>flock of 10 laying hens and 15 meat birds, plus 5 replacement pullets/ year = 30 birds for summer, 10 in winter</p> <p>coop - 80 sqft</p> <p>yard - 120 sqft</p> | <p><u>feed</u></p> <ul style="list-style-type: none"> *protein (beans, bugs, worms) *carbohydrates (grain, seeds) *vegetable matter <p>water</p> <p>shelter</p> <p>roosting</p> <p>access to outdoors</p> <p>predator protection</p> <p>chicks</p> | <p>eggs</p> <p>meat</p> <p>shit</p> <p>scratching</p> <p>bug control</p> <p>feathers</p> <p>heat</p> <p>kids' enjoyment</p> | <p>kitchen- daily</p> <p>annual gardens</p> <ul style="list-style-type: none"> *weekly (to feed weeds) *seasonally (to scratch and clean soil) <p>compost pile- daily</p> |
| chicken coop | 80 sqft building | <p>feed</p> <p>water</p> <p>roost</p> <p>nest boxes</p> <p>bedding</p> | <p>security from predators</p> <p>warmth</p> <p>shelter from elements</p> | <p>chickens- constant</p> <p>kitchen- daily</p> <p>compost area- seasonally</p> |
| chicken yard | 120 sqft fenced in space | <p>fencing</p> <p>bedding</p> | <p>security from dogs</p> <p>concentration of scratching</p> <p>keeps chickens out of rest of yard</p> | <p>coop- daily</p> <p>truck- monthly</p> |
| chicken compost area | contained area within chicken yard for piling compost materials, including yearly coop clean-out | <p>grass cuttings</p> <p>vegetative and brushy prunings</p> <p>leaves</p> <p>seaweed</p> <p>kitchen scraps</p> <p>storage area for large quantity carbon materials</p> <p>old coop bedding</p> | <p>high quality, low effort compost</p> <p>incredibly charged, loose, fertile soil beneath</p> <p>insect and microorganism attractant</p> <p>chook food</p> | <p>coop- daily</p> <p>kitchen- daily</p> <p>annual gardens- weekly in, seasonally out</p> <p>perennial gardens- seasonally</p> <p>truck- monthly</p> |

| element | description | inputs | outputs | access |
|------------------|--|--|---|--|
| ducks | <p>medium sized omniverous water birds</p> <p>flock of 15 for summer only</p> <p>hut - 40 sqft</p> <p>yard - 50 sqft</p> | <p><u>feed</u></p> <p>*protein (beans, bugs, worms, slugs)</p> <p>*carbohydrates (grain, seeds)</p> <p>*vegetable matter</p> <p>water to drink and play in</p> <p>shelter</p> <p>predator protection</p> <p>access to outdoors</p> <p>chicks</p> | <p>meat (eggs)</p> <p>slug control</p> <p>shit</p> <p>feathers</p> <p>heat</p> <p>kids' enjoyment</p> | <p>kitchen- seasonally</p> <p>annual gardens</p> <p>*daily (slug patrol)</p> <p>*seasonally (slug egg patrol and compost deposit)</p> <p>pool- daily</p> |
| duck hut | <p>40 sqft building with a dirt floor and low ceiling</p> | <p>feed</p> <p>water</p> <p>bedding</p> | <p>predator protection</p> <p>shelter from elements</p> | <p>house- daily</p> <p>duck yard- daily</p> <p>truck- monthly</p> |
| duck yard | <p>fenced area at least 50 sqft</p> | <p>fencing</p> <p>bedding</p> | <p>protection from dogs</p> <p>concentration and placement of slug control</p> | <p>house- daily</p> <p>hut- daily</p> <p>truck- monthly</p> |

Storage and Work Areas

| element | description | inputs | outputs | access |
|--|--|---|-------------------------------|---|
| garden tools and material storage | covered area 4 x 4 ft with pegs and shelves | wheelbarrow garden tools bought fertilizers | dry storage space | annual garden-monthly perennials-seasonally |
| indoor seed starting system | in-house shelving unit 1 x 4 x 6 ft tall | starting mix pots seeds warmth | plant starts | water source- daily in late winter and spring annual garden-weekly in spring |
| feed storage | indoor shelving unit 2 x 2 x 6 ft tall | poultry feed mineral supplements | dry storage space | poultry houses-weekly truck- seasonally |
| outdoor kitchen | countertop with hose or sink | washing produce butchering birds filleting fish | foods ready for kitchen | annual garden- daily poultry- seasonally truck- seasonally |
| cooking area | moveable bbq | grilling food dry alder | foods ready to eat | kitchen- monthly |
| firewood storage | covered areas totaling 16 x 16 sqft, 8 ft tall | green firewood | dry firewood | house- daily truck- seasonally |
| firewood splitting area | 8 x 8 ft space | rounds of wood | split firewood | woodshed- adjacent |
| parking area | 14 x 16 ft space | flat space, shade okay | parking for 1 car and 1 truck | house- daily |

Recreational Areas

| element | description | inputs | outputs | access |
|--------------------------------|---|---|--|--|
| lawn | 12 x 12 ft area of soft short ground cover plants | dirt water drainage part sun fertilizer | enjoyment for adults and children clippings | house- weekly compost- monthly in, seasonally out |
| seating area/ porch | 5 x 8 ft area roof with enough overhand to protect from driving rain hard, flat, floor-like surface | space with good view and sun one bench and a few moveable chairs place to set a drink | enjoyment for adults warm, dry microclimate | house- daily |
| playhouse | 5 x 5 x 5 ft building | space- shade okay | fun for kids | house- daily woods- daily |
| climbing tree | tree with low branches | space | fun for kids | house- daily |
| fence/hedge | 20 ft long barrier on western edge of side yard | space dirt visual barrier | sense of privacy | house- seasonally |