

SITE ASSESSMENT WORKBOOK

Observe Before You Act

Part of the SPUDNIK Regenerative Starter Kit

"Observe and Interact" — Permaculture Principle #1

The first principle of permaculture design. Before you dig, before you plant, before you build—observe. This workbook guides you through a systematic assessment of your site's resources, challenges, and potential.

Why Site Assessment Matters

Every piece of land is unique. The same gardening techniques that work brilliantly in one location may fail completely in another. By taking time to observe and document your site's characteristics, you can:

- Design with nature rather than against it
- Identify existing resources you might overlook
- Anticipate challenges before they become problems
- Place elements (beds, compost, water storage) in optimal locations
- Save time, money, and frustration by working with your site's natural patterns

How to Use This Workbook

Complete this workbook over the course of at least one full season—ideally a full year. Patterns that are obvious in summer may be invisible in winter. Morning sun differs from afternoon sun. Spring water flow differs from summer drought. Take your time. Return to sections as you learn more about your site.

SECTION 1: Basic Site Information

| | |
|---------------------------------------|--|
| Site Name/Address: | |
| Total Area (m ² or sq ft): | |
| Growing Area (estimated): | |
| Climate Zone: | |
| Average Last Frost Date: | |
| Average First Frost Date: | |
| Annual Rainfall (mm/inches): | |
| Elevation: | |
| Assessment Date: | |
| Assessed By: | |

Site History

| | |
|---------------------------------|--|
| Previous land use: | |
| Known chemical applications: | |
| Existing structures: | |
| Time on site before assessment: | |

SECTION 2: Sun & Light Mapping

Understanding sun patterns is critical for plant placement. Full sun crops need 6+ hours of direct light. Partial shade crops tolerate 3-6 hours. Shade-tolerant crops can thrive with less than 3 hours of direct sun.

Sun Observation Log

Record sun/shade patterns at different times of day and year:

| Time/Season | Summer | Equinox | Winter |
|-------------------|--------|---------|--------|
| Morning (8-10am) | | | |
| Midday (11am-1pm) | | | |
| Afternoon (2-4pm) | | | |
| Evening (5-7pm) | | | |

Use: FS=Full Sun, PS=Partial Shade, SH=Shade, DS=Dappled Shade

Shadow Sources

- Buildings (note height and direction): _____
- Trees (deciduous or evergreen?): _____
- Fences/walls: _____
- Neighboring structures: _____
- Hills/slopes: _____

SECTION 3: Water Flow & Drainage

Water is the master of landscapes. Understanding where it comes from, where it goes, and where it collects is essential for both plant health and infrastructure placement.

Water Sources

- Municipal water available? _____
- Well on site? Depth: _____ Quality: _____
- Rainwater collection potential (roof area): _____ m²
- Natural water features (streams, ponds): _____
- Greywater available? _____

Drainage Observation

Observe during rain events:

- Where does water enter the site? _____
- Where does it pool or collect? _____
- Where does it exit? _____
- Are there erosion patterns? _____
- Does soil drain quickly or slowly? _____

Sketch your water flow patterns:

[Sketch water flow arrows and collection points here]

SECTION 4: Soil Assessment

Soil is a living ecosystem. Before amending, understand what you're starting with. These simple tests give you baseline information without expensive lab analysis.

Texture Test (Jar Test)

Fill a jar 1/3 with soil, add water, shake vigorously, let settle 24 hours. Sand settles in 1 minute, silt in 1-2 hours, clay in 24+ hours.

- Sand layer (%): _____
- Silt layer (%): _____
- Clay layer (%): _____
- Soil type (sandy/loamy/clay): _____

Drainage Test

Dig a 30cm hole, fill with water, let drain, refill, time drainage:

- Time to drain (minutes): _____
- Interpretation: <15 min = fast (sandy), 15-60 min = moderate (ideal), >60 min = slow (clay)

Biological Activity

- Earthworms present? (dig 30cm cube, count): _____
- Fungal threads visible? (white mycelium in soil): _____
- Soil smell (earthy/sour/no smell): _____
- Surface crust present?: _____
- Organic matter visible?: _____

■ *TIP: 10+ earthworms per 30cm cube indicates healthy soil biology.*

SECTION 5: Existing Resources Inventory

What do you already have? Many resources are invisible until you look for them. This inventory helps you see abundance rather than lack.

Existing Plants

| Plant/Tree | Location | Condition | Keep/Remove? |
|------------|----------|-----------|--------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Available Materials

- Wood chips/mulch source: _____
- Compostable materials: _____
- Cardboard/newspaper: _____
- Stones/rocks: _____
- Salvaged building materials: _____
- Neighbor's yard waste: _____
- Local brewery/coffee grounds: _____

Nearby Resources

- Forest for IMO collection: _____
- Manure sources (farms, stables): _____
- Free mulch (tree services, municipality): _____
- Seed library/swap: _____
- Gardening community/mentor: _____

SECTION 6: Microclimate Identification

Your site contains multiple microclimates—small zones with different conditions than the surrounding area. A south-facing wall absorbs heat. A low spot collects frost. Identifying these allows precise plant placement.

Microclimate Checklist

- South-facing walls (heat sink, extend season): Location: _____
- Frost pockets (cold air collects in low spots): Location: _____
- Wind-protected areas: Location: _____
- Wind-exposed areas: Location: _____
- Heat islands (paving, dark surfaces): Location: _____
- Cool zones (shade, water features): Location: _____
- Humid areas (near water, poor drainage): Location: _____
- Dry areas (rain shadow, fast drainage): Location: _____

Wind Patterns

- Prevailing wind direction: _____
- Seasonal variations: _____
- Wind breaks needed?: _____
- Existing wind protection: _____

SECTION 7: Zone Analysis (Permaculture Zones)

Permaculture zones organize your site based on visit frequency. Zone 0 is your home. Zone 1 is visited daily. Zone 5 is wild/unmanaged. Place elements requiring frequent attention closer to your home.

| Zone | Description | Visit Frequency | Your Location(s) |
|------|---------------------------------|-----------------|------------------|
| 0 | The home/shelter | Constant | |
| 1 | Intensive garden, herbs, salad | Daily | |
| 2 | Perennials, main crops, compost | Every few days | |
| 3 | Main crops, orchards, pasture | Weekly | |
| 4 | Managed forest, grazing | Occasionally | |
| 5 | Wild, no intervention | Rarely | |

■ *TIP: Your most intensive gardens should be between your back door and your compost bin—places you pass daily.*

SECTION 8: Challenges & Opportunities

Challenges to Address

- Poor soil (describe): _____
- Drainage issues: _____
- Pest pressure (specific pests): _____
- Limited space: _____
- Shade: _____
- Water access: _____
- Time limitations: _____
- Budget constraints: _____
- Other: _____

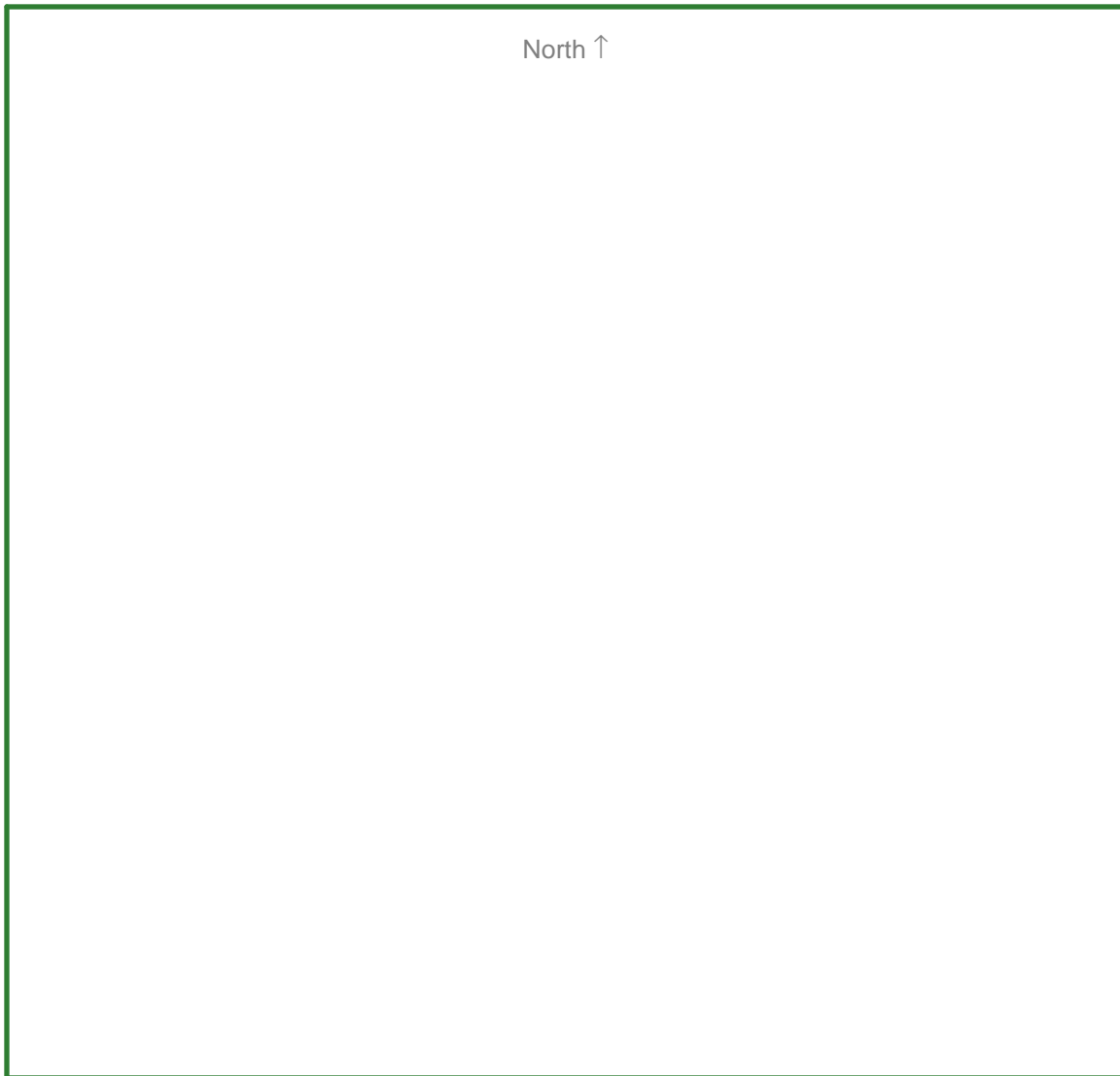
Opportunities Identified

- Best growing locations: _____
- Underutilized spaces: _____
- Free resources available: _____
- Community connections: _____
- Unique site features to leverage: _____
- Other: _____

SECTION 9: Site Map

Draw a rough map of your site. Include: boundaries, buildings, existing plants, sun patterns, water flow, access paths, and potential growing areas. This doesn't need to be artistic—just functional.

Site Map (Draw Below)



North ↑

Legend: Use symbols for sun (☀), shade (☷), water (💧), slope (📏), wind (→)

SECTION 10: Priority Action Items

Based on your assessment, what are your top priorities?

Immediate (This Month)

1. _____
2. _____
3. _____

Short-Term (This Season)

1. _____
2. _____
3. _____

Long-Term (This Year+)

1. _____
2. _____
3. _____

Assessment Complete!

Return to this document as you learn more about your site. Update it seasonally. Your understanding will deepen over time, and so will your design.

■ *The Council Has Spoken: Observe Before You Act* ■