Adapting ecological succession to promote human and wildlife interaction.
4 acres turf
6 acres deciduous
30 acres swamp
FRAGMENTATION ON AND AROUND SITE
LOOKING OUT OF THE HOUSE

[Image of a yard with trees and a driveway]
LOOKING OUT OF THE HOUSE
AREAS OF THE YARD COMMONLY USED
The view from the house to the pond is important.
Rural properties are not always natural. Land surrounding our homes often consists of turf grass and concrete; this area disconnects the connections we have to our land and disrupts wildlife habitat.
Designers at Studio YOD Design Lab work to the ethos of connecting the environment with their unique architecture. Each light-weight, metal-framed structure is set on a screw base and raised a meter above the ground. This allows for quick assembly of the structure without harming the surrounding landscape, especially the root systems of the surrounding pine forest.
SURVEY RESEARCH

THE FOLLOWING SURVEY PICTURES ARE EXAMPLES FROM THE SURVEY IN THE THESIS BOOK
ATTRACTION

5 out of 5

PERCEIVED AS NATURAL

5 out of 5

ATTRACTION

3.4 out of 5

PERCEIVED AS NATURAL

3 out of 5
Survey number two

100% of participants want to see large birds and whitetail deer on their property.
DESIGN INTRODUCTION
PROJECT GOALS

1) STRENGTHEN CONNECTIONS TO THE USERS LAND BY RECLAIMING LARGE AREAS OF TURF GRASS AND WASTED SPACE.

2) RECLAIM LARGE AREAS OF TURF GRASS AND WASTED SPACE TO BENEFIT WILDLIFE HABITAT.
PROJECT PRINCIPLES

1) USE NATIVE PLANTS TO THIS REGION
2) PLANT PATTERNS IN CONCERT W/ECOLOGICAL PROCESSES
3) GENETIC DIVERSITY IN POPULATIONS
4) ALLOW FOR SELF-THINNING SUCCESSION
5) CREATE REAL HABITAT
PLANTS FROM LOCAL EDU

Lowland Dominant
- Tamarack
- Birch
- White cedar
- Grasses
- Black Spruce
- Leatherleaf
- Bag rosemary

Upland Dominant
- Red oak
- Cherry
- White oak
- Sugar maple
- Birch

** заметки:**
- Dense even w/canopy above
- Very stable

** заметки:**
- Edges are sharp if slope is high in transition
- Edge is less defined if grade is similar in transition
- Disturbance forms edges

** заметки:**
- Edges are sharper if slope is high in transition
- Edge is less defined if grade is similar in transition
- Disturbance forms edges

** заметки:**
- Low land

** заметки:**
- High

** заметки:**
- Low

** заметки:**
- High turf

** заметки:**
- Dense Canopy

** заметки:**
- Open Canopy

** заметки:**
- Transition on edge is attractive

** заметки:**
- Transition on edge is harsh

** заметки:**
- Not attractive

** заметки:**
- Species is rich
- Stable as a community but populations shift over time
- Communities:
  - Grass shrub
  - Shrub
  - Shrub dom. by trees

** заметки:**
- Seasonal interest - aesthetics
- Ecological function:
  - Deer bedding
  - Habitat - Food, cover, water
  - Clean water

** заметки:**
- Spatial structure:
  - Extremely dense ground cover, medium middle w/sporadic height, linear

** заметки:**
- Low coniferous structure

** заметки:**
- Open

** заметки:**
- High

** заметки:**
- Dense Canopy

** заметки:**
- Different ages

** заметки:**
- Water pools

** заметки:**
- Low

** заметки:**
- High

** заметки:**
- High

** заметки:**
- High

** заметки:**
- Open

** заметки:**
- High

** заметки:**
- High

** заметки:**
- High
PREFERRED NATIVE PLANT COMMUNITIES

1) UPLAND OPEN BIRCH COMMUNITY
2) OPEN CANOPY TAMARACK LOWLAND
THE NEW “IDEAL” PLANT COMMUNITY

This plant community takes the upland birch community and adds native flowering perennials to create our “ideal” version of a natural plant community.
WHAT DOES THIS PLANT COMMUNITY OFFER?

_HIGHLY AESTHETIC_

_OFFERS VAST OPEN VIEWS BECAUSE OF THE OPEN CANOPY_

_HIGH DIVERSITY_

_LOW MAINTENANCE_

_DOMINANT PLANTS CHOSEN TO SUCCEED THROUGH TIME_
Native perennials grow through short grasses to add color and texture all year. Tall matrix grasses have a low density to keep perennials visible. The majority of the planting is structural to guarantee unique texture and monocromatic color all year.

Keeping the canopy open allows for vast views of the land and good understory growth.
MASTER PLAN
DEVELOPMENT
STEPS TO ACHIEVE WILDLIFE HABITAT GOAL AT MASTER PLAN SCALE

STEP 1:
INCREASE DEER USAGE OF NORTH AND SOUTH DECIDUOUS FORESTS BY CREATING A BUFFER ZONE AND RECONNECTING THE FRAGMENTED FOREST

STEP 2:
CREATE A DEER TRAVEL CORRIDOR THAT PROVIDES YEAR ROUND NUTRITION, SAFETY AND COVER.
STEPS TO ACHIEVE WILDLIFE HABITAT GOAL AND USER CONNECTION GOAL AT MASTER PLAN SCALE

STEP 1:
INCREASE CONNECTIVITY BY CREATING NEW TRAIL SYSTEMS

STEP 2:
RECLAIM UNUSED AREAS OF TURF GRASS WITH THE NEW IDEAL OPEN BIRCH + GRASS PLANTING COMMUNITY AND LOWLAND TAMARACK PLANTING COMMUNITY
SITE PLAN DEVELOPMENT

- SHRUBS
  - Lowland dom. shrub
  - Different ages

- Dense canopy
  - Coniferous structure
  - Low

- Special structure:
  - Extremely dense ground cover, medium height, w/ speed & height, linear

- Seasonal interest aesthetics

- Ecological function:
  - ER Bedding
  - Habitat - food, cover, water
  - Clean water

- Communities:
  - Grass shrub
  - Shrubs
  - Shrub dom. by trees

- Species is rich
  - Stable as a community
  - But populations shift over time

- Complex population structure shifts together
STEPS TO ACHIEVE “USER CONNECTION GOAL” AT SITE PLAN SCALE

STEP 1:
CREATE A CENTRAL PLACE FOR GATHERING AROUND A FIRE

STEP 2:
RECLAIM UNUSED AREAS OF TURF WITH THE NEW IDEAL BIRCH AND GRASS PLANTING COMMUNITY
HARDSCAPE SPACE:
Using stone that complements existing stone on the house
VERTICAL ELEMENTS AND INDIRECT PATH:
STONE PILLARS PUSH OUT OF THE VEGETATION AND HOLD TIMBER BEAMS TO CREATE AN OVER HEAD PLANE. ALONG WITH VERTICAL ELEMENTS, THE PATH CURLS AROUND THE CENTRAL FIRE AREA TO GIVE THE ENTIRE PLACE ADDED DIMENSION AND NATURAL CHARACTER.
STONE SEAT WALLS AND BOULDERS:
STONE, WOOD AND VEGETATION RADIATE AROUND THE FIRE TO REFLECT LIGHT AND MAKE THE PLACE COMFORTABLY RUSTIC