## Home Greenhouses/"Playhouses"

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WHY: "Why do you want a greenhouse?" What are you going to use it for?

SIZE? Many ready-made hobby greenhouses are 6x6 or 8'. 6 - 7 feet clearance. Custom made can be any size. Seriously consider, 'bigger is better'.

## WHERE:

Orientation: North - South alignment. Maximize the SUN. PNW. Consider the angle of the sun.

WHAT: Many shapes and sizes to choose from. *Quonset*; *Semi-Quonset*; *Gable*; *Semi-Gable*; 'Lean to', A-frame, greenhouse windows. COLD FRAMES

HOW: Materials needed. Use, budget and size will often dictate the materials used. Frame: Wood (Always treated), Galvanized steel or aluminum, PVC - (Poly Vinyl Chloride) Terms: Bows, Legs (for Sidewalls), Purlins, Endwalls, Sidewalls

Coverings: Poly (plastic sheeting) 4mil.. 6 mil.; Construction Grade VS Greenhouse Film; Lexan (twin wall polycarbonate); Solexx (twin wall polycarbonate with flutes that diffuse light); Fiberglass (still used, make sure use UV resistant, harder to insulate efficiently); Poly with threads

Terms: Double-wall poly, Inflation blower with mounting bracket, Spring loc ('wiggle wire'), T-lock and track.

Floor: Crushed rock with weed-block fabric. Concrete with drain.

Door(s): determined by size of house and accessibility need.

Climate Control: Fans for ventilation, Heater, with thermostat, Energy blanket, Shade Cloth

Accessories: Benches, Potting Bench (work table), Benches, Soil bin, container storage, 'S' hooks for baskets, Propagation mat or heating cables with thermostat, Fertilizer injector, Siphon adequate for hobby GH, pruning shears, scissors, tags, good UV resistant marker.

## Let's Get Growing!

Soil - Fertilizer - Water: Must work together to grow successful crops.

Soil: Soil-less media: usually a mixture of peat moss, perlite, vermiculite and pumice. Addition of calcium/magnesium to neutralize, trace elements (miners), and iron. A wetting agent is helpful. Check the label.

Fertilizer: Water-soluble liquid feed with trace elements, 20-9-20 or 15-0-15 for early spring (dark days) and then switch out with a complete 16-17-17 or 15-16-17 for bright days and later in the season. Organic fertilizers formulated for mixing with soil, which would contain Kelp, Bone and Cottonseed Meal break down slower and need warmer temperatures (70 degrees), but last longer. Or complete liquid feeds, such as Fish Fertilizer 5:1:1. Nature's Source Plant Food (NSPF) = seed extracts. https://www.naturessourceplantfood.com/

Terms: pH, ppm, N-P-K (nitrogen-phosphorus-potassium), trace elements

Water: Generally our water in the local area is consistent for acidity. Have it professionally tested. Your water is an important element in the fertility 'package'. Most vegetative annuals, i.e. petunias and calibrachoa (Million Bells) are acid lovers. About 5.6.

Pests: Disease and Insect ...

#1= SANITATION: SANITATION, SANITATION.... Greenhouse structure (includes benches etc.) the summer, Zero-Tol. Bringing in plants from outside sources, always check for insects/disease, WEED CONTROL, , sterilize tools between plants, Sterilized (soil-less) media. Clean water source, washing pots... (Bleach, warm water and soap).. Soak

#2= DRY and COLD: high heat and humidity are the 2 things that promote disease.

#3= AIR CIRCULATION: Vent... Vent... Vent.

#4= PESTICIDES: Before you spray ... Identify the culprit. Mechanical Control is 100%! Select control or preventative accordingly. Follow directions! --- The "label is the law". Natural disease control = baking soda. Safe spray for insects includes rubbing alcohol.

The ART and SCIENCE of Growing

PROPAGATION: Seed, cuttings, divisions

Cuttings: Rooting your 'slips', cuttings. Hormone, allow succulents and geraniums to 'callus', Heat mat, Temperature and Water/Mist. RAI (Royalty Administration International = protection for patented plants)

Seeds: Catalogs, Saving Extra Seed, Saran/plastic cover. Moisture and heat.

Timing: Micro-Climates: Diversity of Crops:

Cold Frames: Where plants go to 'harden off' before transplanting to outdoor conditions. Could be your greenhouse with heat turned off.

**GREENHOUSE GROWER:** You are on your way!

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FREE Territorial Seed Catalog www.territorialseed.com