Why do it?
–Preserve genetic diversity
–Saving cultural and traditional varieties
–Curb Corporate Control of our seed and food supply
–Over time varieties will become highly adapted
–It's fun to grow out unique heirloom varieties or your favorites
–Save money
–Build community, share with your neighbors
–Gardeners are stewards!

The top 10 seed companies control 57% of the global seed market.

Seed industry concentration has resulted from major pesticide manufacturers like Monsanto, DuPont, Bayer and Dow buying up half the world's seed supply.
www.centerforfoodsafety.org

Results of Corporate Control of Our Seeds/How they Control Our Seeds

- Owned by fewer and fewer corps.
- Use and promotion on genetically modified seeds that promote use of pesticides
- DEPENDANCY of farmers on seed/agrochecm/costly

How do they control our seeds?

–patenting;
–genetic engineering;
– technology use agreements;
–and terminator technology designed to make plants sterile so they are unable to reproduce, and so that farmers are unable to save the seed from these crops for future planting.

Patenting life forms was legalized in 1985 – prior to that farmers were able to save and distribute their seed without fear of legal prosecution – now they have to be concerned because their seed might have been cross bread with a GMO variety.

What Are GMOs?

By being able to take the genetic material from one organism and insert it into the permanent genetic code of another,

Examples
–potatoes with bacteria genes,
–"super" pigs with human growth genes,
–fish with cattle growth genes,
–tomatoes with flounder genes

GMO Crops crossbreed and destroying traditional varieties of crops that have been raised for thousands of years.

•Open Pollinated -traditional varieties which have been grown and selected for their desirable traits for millennia, adapt to area

•Hybrid Seeds - Hybrid seeds are the first generation offspring of two distant and distinct parental lines of the same species. Seeds may either be sterile or more commonly fail to breed true

•Genetically Modified Seeds – seeds taken from a plant in which genetic material of one organism has been permanently inserted into the genetic code of another – it is illegal to save these seeds.

Annual (beans, peppers, tomato, squash) Vs Biennial (beets, burssels sprouts, cabbage, carrots)

What Kind of Seed Do You Want to Save?

Open-pollinated, (pollinated by wind, bees, other insects) non-hybrid, non-gmo, heirloom varieties of seeds.

Heirlooms are cultivated forms of crops that have been perpetuated by gardeners who save seed from year to year

Always choose the heartiest plants from the gardens with no disease. Through out the season weed out any unhealthy plants in the garden so they don't cross breed with the healthy ones.

Always save seeds from more than one plant in order to maintain broader genetic base for garden improvement

Always choose the best fruits/veggies off those plants.

Must separate same types so they don't cross pollinate

Ways to Isolate:

- Grow one variety each season
- Separate plants by distance
- Stagger plantings so they wont flower at the same time
- Enclose plants within hoop houses etc (however you'll then need to self pollinate).

Three Methods of Seed Collecting:

- Plants with edible seeds (beans or peas) – when hard and dry 4-6 weeks after rest has been collected for eating, before frost)
- Plants that scatter their seed (dill, mustards, flowers) (just before seeds are about to scatter cut off seed heads and place face down in paper bag for two weeks, they will fall off into bag, set out to dry 2 weeks before storage)
- Plants with seeds encased in fleshy fruit (tomato, pepper, squash) (
    - leave fruit on plant until slightly over ripe,
    - scoop seeds out, place in bowl with water for 2-3 days andc

- stir occasionally
- pulp and inviable seeds will be at top
- viable seeds at bottom
- scoop out pulp/bad seeds
- put the rest through strainer, rince thoroughly
- set out to dry for one to two weeks before storage (on newspaper or fine mesh screens)

Where to Store Seeds –

- Cool dry place
- Keep temperature consistent
- Make sure their in secure containers

Label packaged seeds with cultivar name, date collected etc

Test seed viability = 10 or 100 seeds, place in rolled up moist paper towel, then in place in warm area , keep towel damp

When seeds sprout take count