DEFINITION OF COMPANION PLANTING (extrapolated from Wikipedia)

the planting of different crops in proximity for pest control pollination

providing habitat for beneficial creatures

maximizing use of space

and to otherwise increase

Classic Example – The Three Sisters Model: Corn, Squash And Pole Beans

Corn stalks provide support for climbing beans, which don't compete with the corn and provide nitrogen; squash stays near the ground and creates dense cover that shades the soil and keeps weed growth low.

CONFLICTING OPINIONS/ CONFUSING DATA

Example 1-- Tomatoes

"Carrots Love Tomatoes – Secrets of Companion Planting for Successful Gardening" by Louise Riotte is a popular text for gardeners interested in companion planting.

However, "Companion Plants: Carrots Really Detest Tomatoes" has been published by Craig Dremann, owner of Redwood City Seed Co., in rebuttal. (You can order this booklet at www.ecoseeds.com).

Explanation:

Carrots attract lacewings and predatory wasps that benefit tomatoes

Both tomatoes and carrots are helped by alliums

And they both hate dill

But tomatoes stunt the growth of carrots. They don't hurt the taste, just the growth.

And about dill:

young dill improves growth and health of tomato plants;

mature dill will stunt the tomato's growth.

Plus, dill attracts hornworm to the vicinity of tomatoes when planted close-by.

Example 2 – Disagreement between sources

The Dog Island Companion Planting Chart disagrees with Wikipedia about tomatoes and brassicas; Wikipedia says brassicas are adversaries, Dog Island says "friends". You'll find this sort of disagreement everywhere.

TOMATOES ARE HELPED BY

Basil & Calendula (both repel whitefly and hornworm); basil can increase tomato yield by as much as 20% when planted within 10 inches

Borage (repels hornworm)

Chives, onions and garlic (which put off odors that confuses and deters many insect pests) Marigolds (repels whitefly; for nematode protection, plant and earlier crop, chop and till into the soil, or plant tomatoes where marigolds have been for some time (Univ. of Florida IFAS Extension study on nematode suppression*)

Mint (repels aphids)

Nasturtiums (help deter whitefly and aphids)

Parsley (as trap crop for pests)

TOMATOES HELP

Asparagus, (repels asparagus beetle)

Roses (repels black spot)

TOMATO ADVERSARIES

Potatoes (makes potatoes more susceptible to blight)

Strawberries (one can give the other verticillium wilt)

Fennel

Black Walnut tree (juglone allelopathy)

Stone fruits (Apricot, Peach, Cherry: all three are susceptible to verticillium wilt and late blight)

GUARDIAN ANGEL PLANTS, THE UNIVERSAL GOOD GUYS

Borage, Calendula, French Tarragon, Lemon Balm (Melissa), Lovage, Marigolds (Tagetes sp.), Marjorum, Nasturtiums, Oregano, Thyme, Yarrow. Tuck these in the garden wherever you like. They play well with everyone.