



Note 1.05
(Previously Note #2A)

AN HERB GARDEN FOR THE BEES

In addition to "merely" keeping bees, the successful beekeeper must often branch out into many other areas of expertise, such as botany, carpentry, wholesale/retail marketing mechanics, accounting, etc. All of these related areas are important but a working knowledge of botany is probably one of the most important. As beekeepers, we are intrinsically botanists, for bees and plants are interdependent and the nature and productivity of the plant population plays a major role in the success or failure of any beekeeping operation.

One frequently stated need of many beekeepers is how to increase nectar availability in an area. Herbs provide a direct means for the beekeeper to improve and expand the honey flow in this area. An herb is defined as any nonwoody plant that dies down to the ground after flowering. More commonly, herbs are defined as plants that are used for such purposes as medicinal treatment, nutritional value, food seasoning, coloring or dying. Herbs are extremely versatile plants and, unlike trees and shrubs, most will bloom the same year that they are planted. With sufficient variety, an herb garden can have plants in bloom for 10 months of the year.

With a little planning, herbs can provide both excellent nectar and pollen sources for honey bees. These plants can supply valuable bee pasture during periods of dearth, but careful planning must precede planting. Most herbs will grow anywhere, and most will bloom profusely, but not all will attract honey bees. Strict attention must be paid to varieties, ecotypes, soils, climate, fertilization, and watering.

Varietal selection is most important. Some plants, such as feverfew, simply will not attract honey bees. Ecotypes are an even more subtle difference that play an equally important role. Ecotypes are species of plants that are adapted to a particular environment. This is to say that a

catnip plant native to Iowa may not grow, or bloom, or produce nectar the same if it were transplanted to a location in North Carolina. Thus, the herb gardener with an eye towards nectar production should be very careful in ordering plants from areas with different climates, for the plants will

look the same, but their systems may well be altered due to the change in environment, and they may perform differently. To add a tempering note, plants touted as honey plants in other parts of the country may fail miserably in North Carolina, but other "unknowns" can fill the niche and perform very well under North Carolina conditions. Fertilization, water, and soils are things the herb gardener can control, and normal gardening practices would be followed in these areas.

Designing an Herb Garden

An herb garden can be as simple or complex as the gardener desires. Herbs can be grown in established borders, among low growing shrubbery, or in a vegetable garden. The simplest way, in terms of organization and care, is to designate a certain space for herbs and herbs only. The design one chooses can range from formal gardens to simple displays. Care should be taken to segregate tall growing herbs such as the bee balms from low spreading herbs like the mints and thymes to minimize unwanted shading. Planting herbs of the same family (i.e. the mints) in groups also eases care and identification.

The authors recommend planting herbs in a raised bed bordered with railroad cross ties, or similar materials, to keep the herbs in and the weeds out. After filling the bed with soil (preferably a light soil to promote early growth and provide good drainage), have a soil test run to insure a pH of 6.5-7, and add organic matter in whatever form is convenient. Soil fertility should be kept at a low to moderate level, as heavy fertilization will extend the vegetative portion of a plant's life cycle, causing a later reproductive, or flowering phase.

The next step is to apply a mulch. Black plastic provides an excellent mulch for herbs. It serves to warm the soil in the spring, prevent evaporative moisture loss from the soil, completely control weeds, and if the herbs are planted in pot sized holes in the plastic, control the spread of those herbs which would otherwise take over the herb garden. Water can be applied to the base of the plants when needed, and holes can be punched in the plastic with a nail to facilitate drainage of rain water. An additional "cosmetic" mulch of pine bark, or sawdust can be spread on the plastic if desired.

The beekeeping herb gardener usually has more than enough things to do, so the herb garden should be designed for minimal maintenance. Congruent with the concepts of a raised bed, moisture saving mulch, and "container-sized" planting holes, is the use of perennial herbs wherever possible.

Perennials die back each fall but return the following spring and will last for many years, if properly cared for. Herbs can be propagated from seeds, cuttings, or layering. Layering is generally easiest, the procedure being to cover a portion of the plant stem with a mound of soil, and roots will shortly

form on the portion covered by the soil. This new plant can be cut off from the mother plant and planted in a new location. Any plants started from seed should be planted indoors or in a cold frame early in the spring and transplanted to a permanent site with the onset of warm weather.

The following list of herbs is based upon the results of a two year research project conducted by the authors at N. C. State University. The listed herbs were selected primarily on their attractiveness to honey bees, but ease of growing and long term maintenance were also contributory factors.

Herb	Growth Habit	Propagation	Use	Attractiveness to Bees
Basil	annual, 12"	seed	culinary herb	moderate
Bee Balm	perennial, 24"	seed, division	mint teas	high
Borage	annual, 10"	seed	garnish foods	high
Catnip <i>Musini</i>	perennial, 20"	seed	sedative teas	high
Catnip <i>Catara</i>	perennial, 20"	seed	sedative teas	high
Chives	perennial, 12"	seed, bulbs	culinary herb	slight
Comfrey	perennial, 36"	division	medicinal herb	slight
Hyssop (Anise)	perennial, 36"	seed	teas	high
Lavender	perennial, 24"	seed	sachets	slight
Marjoram	perennial, 12"	seed	culinary herb	moderate
Mints	perennial, 10"	cuttings, division	mint teas	high
Sage	perennial, 12"	seed, division	culinary herb	moderate
Salvia, blue	annual, 24"	seed	ornamental	high
Salvia, white	annual, 24"	seed	ornamental	high
Spider Plant	annual, 24"	seed	ornamental	high
Teasel	perennial, 36"	seed, division	ornamental	moderate
Thistle, Globe	perennial, 48"	seed	ornamental	moderate
Thymes	perennial, 6"	seed, cuttings	culinary herb	high
Yarrow	perennial, 24"	seed	tea	slight

- Notes:
1. Some of the herbs such as the mints may impart a very distinctive flavor to the honey that the bees produce.
 2. The above "uses" of the herbs are listed for informational purposes only and is not meant to be an endorsement of any particular use.

References:

Clarkson, Rosetta E. 1970. Herbs, Their Culture and Uses. MacMillian Publishing Company, New York, N.Y.

Foley, Daniel F. 1971. Herbs for Use and Delight. Dover Publications, Inc. New York. N.Y.

Lust, John. 1974. The Herb Book. Bantam Books, New York, N.Y.

Meyer, Joseph E. 1960. The Herbalist. Meyerbooks, Glenwood, Ill.

Stary, Franfised and Valclav Jirasek. 1973. Herbs, A Concise Guide in Color. Hamlyn Publish Group Ltd., New York, N.Y.

Seed Sources: The following list is for informational purposes only and the inclusion of a firm does not constitute endorsement nor does the exclusion of a firm suggest non-endorsement.

Pellet Gardens Catalog of Honey Plants, Atlantic, Iowa 50022.

Nichols Herb and Rare Seeds, 1190 N. Pacific Hwy., Albany, Oregon 97321.

Parks Seeds, Greenwood, South Carolina 29647.

A World Seed Service, J. L. Hudson, P.O. Box 1058, Redwood, California 94064.

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