# Horticulture, Conservation 8 Flowers



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## GARDEN - FRUITS/VEGETABLES - (GCC)

#### BEGINNERS (1-2 years in project/9-11 years old)

#### SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Vegetable guide available at MSU Extension office showing various numbers and 1.
- vegetables to exhibit. Grow 2 new kinds of fruits/vegetables or herbs each year. 2
- Identify 8 new kinds of fruits/vegetables or herbs each year. Learn when to harvest your fruits/vegetables.
- 4.
- 5 Grow at least one kind of plant that needs to be pinched, pruned, or trained (such as peas, beans, tomatoes, or other vine crop.)
- 6. 7. Grow ornamental fruits/vegetables Grow midget fruits/vegetables and compare with standard.

## SUGGESTED PROJECTS FOR BEGINNERS

- Make or create a decorative fruit/vegetable and exhibit in open division.
- Make a seed medallion and exhibit in craft division Make an arrangement of gourds or Indian corn (no class available at fair).
- Use MSU Extension publication "Selecting Vegetable for Exhibit" to prepare and exhibit
  - your fair projects.

#### INTERMEDIATES (3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Grow 2 new kinds of fruits/vegetables or herbs.
- 2
- Identify 8 new kinds of fruits/vegetables or herbs. Learn how to preserve herbs. 3.
- 4.
- Learn how to harvest your fruits/vegetables each year. Plant two gardens one companion and one not. Compare 6
  - Compare yields produced with extensive garden verses traditional gardening.

## SUGGESTED PROJECTS FOR INTERMEDIATES

- Exhibit your fruit/yegetable at fair.
- Grow tomatoes in cages, staked and on ground.
- Grow a container garden.
- Learn about and grow different heritage fruits/vegetables to exhibit at fair.

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#### ADVANCED (5+ years in project/15+ years old)

# SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- 1 Become a teen leader in this project.
- Grow 2-4 new kinds of fruits/vegetables or herbs each year.
- 3
- Identify 8 new kinds of fruits/vegetables or herbs each year. Devise 3-4-6 year rotation schemes and explain their importance and purpose. 4. 5.
- Compare yields of vine and bush varieties.

## SUGGESTED PROJECTS FOR ADVANCED

- Design a trickle irrigation system for your garden then build.
- Compare quality and yield from new vs. harvested seeds
- Exhibit your fruits/vegetables at fair.

## FLOWER GARDENING/HOUSEPLANTS - (GCB)

#### GENERAL SUGGESTIONS TO HELP LEADERS

- Resources are available at the Extension Office.
- Visit greenhouses, flower gardens, flower shows, and commercial gardens.
- Encourage members to keep a record of flowers grown on 3 x 5 cards or in a notebook.

#### BEGINNERS (1-2 years in project/9-11 years old)

#### SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Grow 4-7 different kinds of annual flowers each year
- Identify an additional 10 kinds of flowers each year. Collect and save annual seeds.
- 3
- Learn about design concepts. Collect and dry weeds, wild flowers, and cultivated plants and identify them. 5.
- Learn how to use and maintain two different tools each year. Understand plants and their importance in our lives and the environment.
- 8 Learn about photosynthesis.

#### SUGGESTED PROJECTS FOR BEGINNERS

- Make a simple corsage.
- Make 2 floral arrangements each year. Decorate jar to be used as a cut flower container.
- Take an educational exhibit or display to the Jackson County Fair.

#### INTERMEDIATES (3-4 years in project/12-14 years old)

#### SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Grow 4-7 different kinds of flowers, include bulbs and perennials. 1.
- 2 Identify 10 different kinds of flowers each year.
- Explore careers in this field. 3. 4.
- Explore carees in time itere. Learn how to use and maintain two different tools each year. Identification of common wild flowers of Michigan which are protected by law.

## SUGGESTED PROJECTS FOR INTERMEDIATES

- Make a wedding or special event bouquet
- Make 3-4 floral arrangements each year.

## Make an herb or wildflower garden.

- Design an annual flower garden; then plant it. Design a perennial flower garden; then plant it.
- Experiment by removing faded flowers vs. not removing them.
- Collect and save seeds from plants; next growing season plant them for a project.
- Tour a nursery. Take an educational exhibit or display to the Jackson County Fair.

#### ADVANCED (5+ years in project/15+ years old)

## SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Become a teen leader in this project. 1.
- Grow 4-7 different kinds of flowers each year, including perennials and bulbs. Identify 10 different kinds of flowers each year. 3.
- 4. Use a variety of supports for vines.

## SUGGESTED PROJECTS FOR ADVANCED

- Make 4-8 floral arrangements.
- Make a collection of common weeds
- Make potpourri.
- Design or maintain a flower garden for a school, church, or public building. Start your own bedding plants from seeds.
- Take an educational exhibit or display to the Jackson County Fair.

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## INDOOR GARDENING / CONTAINER GARDENING - (GCB)

The objective of this project area is for members to gain a basic understanding of indoor gardening in the following areas: dish garden, terrarium, flowering potted plants, foliage, flowering hanging baskets, foliate hanging baskets, indoor herbs, cactus, and other forms of indoor gardening. With the help of the leader, members should have an understanding of how to grow healthy plants in many combinations or as single plants.

#### BEGINNERS (1-2 years in project/9-12 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Care for 3 different indoor plants each year.
- Identify 3 different kinds of indoor plants each year.
- 4.
- Repot plants as they grow. Pinch, prune, and train a different kind of plant each year. Grow a hanging basket or flower pouch.

#### SUGGESTED PROJECTS FOR BEGINNERS

- Dish garden, grow potted plants such as Philodendron, Coleus, Ivy, Begonia, Geranium, .
- Garbage can garden (plants grown from parts thrown away, ex. pineapple tops, pits, seeds)
- Grow a variety of plants in a container.

#### INTERMEDIATES (3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Care for 6 indoor plants each year. Identify 10 new kinds of indoor plants each year. 1
- 3 Force bulbs indoors.
- Press flowers or leaves, use to make stationary or pictures.
- Force cuttings from landscape shrubs or trees. Experiment with different watering and growing media. 5
- 6.

SUGGESTED PROJECTS FOR INTERMEDIATES

Terrarium, Rain Garden, Dish Garden plants such as Jade, African Violet, Cacti, etc.

#### FLOWER ARRANGEMENT - (GCB) FRESH, SILK, AND DRIED

## BEGINNERS

## (1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Learn type of flowers to be used. 1
- Learn proper sized of containers to use.
- 3. Learn how to finish arrangements. 4. Learn how to dry flowers.
- SUGGESTED PROJECTS FOR BEGINNERS
- Small basket arrangement or vase.
- Use unusual container for arrangement

#### INTERMEDIATES (3-4 years in project/12-14 years old)

# SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Use previously learned techniques and learn more difficult ones. 1
- Learn how to make an arrangement stand out.
- 3 4.
- Experiment with flowers and foliage. Explore cultural flower arrangement. (i.e.: Japanese flower arrangement)

## SUGGESTED PROJECTS FOR INTERMEDIATES

- Small corsages or bouquets.
- Basket or vase arrangements with more detail. Try silk flower arrangements.

#### ADVANCED (5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Become a teen leader in this project. 1
- Continue with skills learned in previous years. Learn more complicated items to do with flowers. 3
- 4 Explore career opportunities in flower arranging.
- SUGGESTED PROJECTS FOR ADVANCED

- Larger arrangements, corsages, etc
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#### ADVANCED (5+ years in project/15+ years old)

#### SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- 1
- Become a teen leader in this project. Care for an additional 6 indoor plants each year.
- 3. Become a teen leader in this project.
- Explore careers in this project. 4 5. Learn the art of Bonsai.
- SUGGESTED PROJECTS FOR ADVANCED
  - Terrarium, Rain Garden, Dish Garden plants such as Jade, African Violet, Cacti, etc.

## CONSERVATION & NATURAL RESOURCES

## WEATHER & CLIMATE - (DBB)

## SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Learn the components of air. 1.
- Learn about the oxygen-carbon dioxide cycle and its role to life. 2. How air pollution affects all things - living and not living.
- 4 How the air affects the weather.
- 5 Identify different types of clouds.

## SUGGESTED PROJECTS

- Exhibit on air pollutants
- Interview a meteorologist

#### RESOURCES

. "Basic Environmental Series-Air"

#### WATER - (DBD)

#### SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- 1 Water's role in the well-being of plant and animal life.
- How man's actions affect water quality.
- Many uses of water. Learn about water conservation. 3
- 5 Learn the water cvcle.

#### SUGGESTED PROJECTS

- Exhibit demonstrating what has been learned about the importance of water, water resources and use, current water problems, problems caused by use and management practices, or investigating and understanding water resource problems. Tour a water treatment facility plant.

#### RESOURCES

- "Groundwater Education Workbook"
- "Wave of the Future" video
- "Tap Water Tour"

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## SOILS & SOIL CONSERVATION - (DBC)

#### SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- 1. How soils form rocks.
- The living components of soil. 2 3
- Soil and soil fertility's role in plant and food growth. How water affects soil. 4.
- Soil's influence on land due to texture, drainage, and slope. 5.

#### SUGGESTED PROJECTS

- Exhibit demonstrating the importance of land and appreciation of its uses. Exhibit showing a watershed survey, soil erosion, physical characteristics of soil,
- problems in soil management, land capability and/or use, etc.
- Base map of a farm and at least one overlay to show one of the following: lime needs, fertilizer needs, land slopes, soil changes, crop rotation, needed land conservation practices, or land use.

#### RESOURCES

- "Basic Environmental Series-Soil"
- "Soil

## FORESTRY - (DDA)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Basic concepts of environmental conservation and forests.
- 2 Learn how forest trees grow.
- Learn about forest plantations and how to plant trees. 3. 4.
- Forest management: tools and science.

## SUGGESTED PROJECTS

- Display containing leaf, seed, and bark collections of at least 15 different trees.
- Exhibit on forest management, including two forestry measurement tools made by the
- member. A poster explaining forestry tools could be included. Exhibit on advanced forest management showing some aspect of the technology or science of forestry.

## RESOURCES

"4-H Forestry Programs-Unit 1 & 2" •

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#### WILDLIFE & FISHERIES - (DDC) FISH

# SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Identification of 10 native fish to Michigan. (Suggested for beginner) 1
- Identification of 20 more native fish to U.S. (Suggested for intermediates) Identification of 30 more fish from around the world. (Suggested for advanced) 3.
- Habitat of different fish.
- 4. 5. Management and problems with fisheries.

## SUGGESTED PROJECTS

- Notebook identifying at least 6 common fish and specific studies on them.
- Notebook showing applied management principles to a specific problem of fisheries.
- Notebook showing studies of fish & natural environment. Tour a hatchery or fishery.

RESOURCES

- 'Great Lakes Fishes'
- "Fishing for Fun"

#### WILDLIFE & FISHERIES - (DDC) WILDLIFE

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

- Understand the importance of wildlife in our lives and in the environment. 1.
- Investigate wildlife needs and habitat-land use problems. 3. Explore wildlife management.

SUGGESTED PROJECTS

- Notebook containing pictures of mammals, winter feeding stations, or artificial dens.
- Construct a nesting box.
- Notebook showing feeding habits, habitat, distribution, etc.
- Wildlife management exhibit showing studies made of present deer herd and deer populations, winter deer yards, winter and summer management, or spring deer yard conditions.
- Exhibit showing wildlife values, food and cover, how to help wildlife, or game laws.