

THE VISITOR

Devoted to the Interests of Agricultural Education in Minnesota Schools

Vol. XXVI

APRIL, 1938

No. 3

Suggestive Outline in Home Landscaping and Ornamental Horticulture for Exchange Classes for Home Economics Students

L. E. Longley and L. Sando

Division of Horticulture, University of Minnesota

I. Small Suburban Home Grounds

- A. Value of a plan for (1) new grounds, (2) improving old grounds.

II. To Provide a Guide for Improvement from Year to Year

A plan should (1) make an economic and more livable arrangement of the parts of a place. (2) give beauty to the place by joining the house and other parts into a harmonious whole.

Divisions of the home grounds.

1. *Public area.*
2. *Service area.*
3. *Private area.*

III. Farmsteads

The Farm Home should be close to other farm buildings which ideally should be grouped around a farm courtyard.

Driveway. The farm residence should be reached easily from the driveway from highway to farm courtyard.

Various ways of handling driveway:

1. Straight drive from highway with sidewalk to the house.
2. Straight drive with oval or circle near the house.
3. Straight drive with branch drive across the front of the house.

Divisions of place:

1. *Public area.*
2. *Service area.*
3. *Private area.*
4. *Added feature.* When the house faces south or east, it is best to use the standard windbreak on north and west. With house facing west or north use standard windbreak on one side, but on side next to the highway break it up into groups to allow view to and from the house.

IV. Materials Used in Planting

- A. The lawn. This is the background on which the design of the place is laid.

There must be a relatively large amount of unbroken lawn surface.

- B. Procedure in building a lawn.
1. Soil types—good medium loam best. If too heavy add sand; if too light add some clay soil. To increase water holding, add humus by using barnyard manure or peat. For fertilizer, add manure or commercial fertilizer. Should always add superphosphate.
 2. Grading for surface water; slope away from house.
 3. Seeding.
 - a. Prepare fine seed bed.
 - b. Rolling for firm seed bed.
 - c. Seed and cover by raking.
 - d. Watering. Often and light till germination. Infrequent and heavy on established grass.
 4. Types of grasses: Blue grass the standard. For especially fine lawn use bent grass (some types are propagated by stolons). For shade, sandy or dry soil use Chewings Fescue. Grass seed mixtures can be used for quick coverage.
 5. General upkeep of lawn.
 - a. Fertilization.
 - (1) By manure.
 - (2) By commercial fertilizer.
 - b. Watering. Soak lawn heavily but not too frequently.
 - c. Weed and pest control.
 - (1) By mechanical methods or digging, pulling, etc.
 - (2) By use of chemicals.
 - (3) by intelligent fertilization.

V. Deciduous Trees

For street planting, background and framing, for shade and for the windbreak.

VI. Deciduous Shrubs

For foundation planting, borders, hedges, groups, etc.

THE VISITOR

Published quarterly during the calendar year, in October, January, April, and July, by the Division of Agricultural Education, University of Minnesota, University Farm, St. Paul, Minn.

Entered as second-class matter at the post office at St. Paul, Minn., under the act of August 2, 1912.

Accepted for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized August 2, 1918.

THE STAFF

A. V. STORM

V. E. NYLIN

A. M. FIELD

LEIGH HARDEN

A. M. FIELD, *Editor*

VII. Evergreens

For foundation planting, borders, hedges, specimen plants, windbreaks, and background planting.

VIII. Herbaceous Flowers

A. Place of flowers in the home grounds.

1. In foundation planting (use sparingly).
2. In beds in formal garden.
3. In informal border.

An informal border is a planting usually in front of a shrubbery border or fence or wall, or alongside of a walk.

B. Flowers for winter bouquets.

Commonly called "dried flowers." These are effective for use in winter, in homes and school room.

1. Types of material used.
 - Flowers, both annual and perennial.
 - Grasses, wild and cultivated.
 - Dried fruits from trees, shrubs or vines, as bittersweet, etc.
 - Seed pods, from wild or cultivated plants.
 - Cones or evergreens. (Frequently colored for Christmas decorations.)
2. Gathering.
 - a. Cut flowers before quite fully opened.
 - b. Arrange in small bunches fastened with small rubber band.
 - c. Hang upside down in a cool dry room to cure.
3. Coloring or dyeing.
 - a. Certain grasses may be made to take up liquid dye through stem when fresh.
 - b. Remainder must have dye applied.
4. Types of dyes used.
 - a. Water soluble
 - b. Oil soluble, paints, etc.
 - c. Dusts
5. Methods of applications
 - a. By dipping sprays in solution.

b. By shaking dust over sprays.

c. By spraying with atomizer, etc.

d. By use of brush for paints as on evergreen cones.

C. Culture of flowers in beds and borders.

1. Soil preparation. Well worked up, well fertilized with rotted manure or commercial fertilizer.
2. Growing the plants. In green house, hotbeds, in the house or in open ground.
3. Setting the plants. Have the soil in good condition, firm the plants well in the soil; watering when planted.

D. Types of plants for the garden.

1. Annuals—
2. Biennials—
3. Perennials—The perennial border may combine all these types; the annuals being especially good to fill in vacancies.

E. Flower arrangement.

1. Types of arrangements in relation to containers.
 - a. Baskets.
 - b. Vases
 - c. Bowls.
2. Types as regards point of view.
 - a. To be viewed from one side only.
 - b. Arranged to be seen from all sides.
3. Types as regards the place of use.
 - a. Table arrangements. For dinner table arrangement, should not unduly obstruct vision.
 - b. Mantel arrangements.
 - c. Wall arrangements, displayed in special arrangements.
 - d. Large vase arrangements placed on floor.

F. Principles of arrangement.

1. Relation of arrangement to container.
 - a. Size and height relationships.
 - Roughly in tall arrangements height should be approximately 50% greater than that of container and in wide arrangements the same ratio should apply to width.
 - b. Harmony. The container should harmonize in color and texture with the flowers employed. Form, color of decoration should not be so striking as to distract attention from arrangement.
2. Balance.
 - a. Have heavily accented part mostly towards base.
 - b. Formal balance.
 - c. Informal or asymmetrical balance. Here one side may be heavier but lines and emphasis are such that an occult balance is obtained.

3. Harmony.
 - a. In colors used. Avoid clashing color. Use green foliage for filler material.
- G. Ways of combining color.
 1. Use only the various shades or tints of a single color.
 2. Use only analogous colors together, i.e. those close together in the spectrum.
 3. Combine complementary colors.
 4. Use strong color contrast as a primary color like red, orange, yellow, green, blue or violet with a neutral color like gray, black, or white. White especially gives great contrast, sometimes too much.
 5. In form of flower. Use similar forms of flowers together.
- H. Rhythms.
 1. In color. Use several shades in the colors employed.
 2. In form. Use several sizes or stages of the same flower, as flowers in bud half open, full open.
 3. In line. Lines of the arrangement should focus attention on important parts. Crossed lines should be avoided.
 4. In symmetrical balance. An irregular arrangement of lines necessary with variation in heights of sprays. Fill in between with flowers or material of light feathery nature.
- I. Proportion.
 1. Relation of arrangement to container.
 2. Scale of material used to each other should be correct.
- J. Emphasis.

There should be one point of emphasis in arrangement where attention will center, preferably towards lower part of arrangement. Achieved by emphatic colors, forms, or line arrangement.

IX. Types of Planting

Background planting—trees just behind the house to show it off. Materials needed in heavy mass planting in background.

Framing. Trees directly in front of and slightly to one side, serve to frame the house. Trees or large shrubs may frame desirable views.

Borders. Informal massing of shrubs, outlining various divisions of the place. The purpose is largely to ensure privacy.

Hedges. For same purpose as borders. Occupy less space.

Types (1) informal, untrimmed; (2) formal, clipped.

Characteristics of hedge plants—thick growth, heavy branching habit, thorns often desirable to exclude animals.

Foundation planting. Means planting at base of the house, walls, or other plants. Purpose: To emphasize or contradict or correct lines of architecture, to provide transition from the vertical lines of house to the horizontal lawn lines; to focalize the attention on the main entrance of the house. This is usually done through providing lines of rhythm by using higher planting at the house corners than at doorways.

Specimen plants. Sometimes plants of unusual beauty of form, color or flower may be planted alone in a conspicuous place.

Planting suggestions for trees and shrubs:

Dig large hole.

Use good soil to fill in.

Firm soil well by tramping or puddling.

Prune top heavily on deciduous plants.

Move evergreens with ball of earth.

X. Growing House Plants

Soil. Proper soil mixture—should be well drained but hold moisture. Should be composed of loam, sand humus—such as leaf mold or peat, and fertilizer, either of manure or commercial fertilizer.

Potting. Pots should allow water to drain out. Cover hole in bottom with broken pieces of pot. Firm soil well in pot.

Growing conditions. Light and proper amount for each plant. Some plants particularly blooming ones, desire full sun; others endure partial shade.

Temperature. Should be as near as possible to optimum of each plant. If rooms are warm, plants that endure heat should be grown.

Humidity of atmosphere. Most plants prefer relatively humid air. Exception, the xerophytic plants, such as cacti and the like. Air of modern houses is usually too dry for most plants.

Watering. Water quite heavily, and only when needed. Less frequent watering needed if glazed pots are used.

Some causes of failure with plants:

Gas from gas fixtures and stoves.

Lack of proper ventilation.

Insect pests—controlled by hand picking or by poison sprays or dusts of various sorts.

Types of sprays:

1. Contact sprays. To control sucking insects and some types of chewing insects.

a. Soap emulsions.

b. Oil emulsions such as kerosene emulsion and Volck's oil emulsion.

- c. Dusts, as e.g. sulfur dust for red spider.
 - d. Sprays containing nicotine, pyrethrum, rotenone, etc. which kill by a paralyzing effect.
2. Stomach poisoning for chewing insects.
 - a. Arsenicals, as lead arsenate or paris green. May be applied as dusts or in water.
 - b. Sprays containing nicotine, pyrethrum, rotenone, etc. which also act through the stomach.

XI. Plant Diseases

1. Types:
2. Control:

XII. List of Plants for the Home (Types)

1. For foliage.
 - a. Plants that endure dry air.
 - b. Plants that require more humidity.
2. For bloom.
 - a. Plants that endure by air.
 - b. Plants that require more humidity.

NOTE.—The Minnesota State Florists' Association, through its members, will furnish a certain amount of plant materials to schools in Minnesota with conservatory that plan to include a study of plant life. Information concerning available material may be secured from L. Sando, President, Minnesota State Florists' Association, University Farm, St. Paul, Minn.

Publications

Books

- Ramsey, L. W., *Landscaping the Home Grounds*. Macmillan Company, New York City, N. Y.
- Bottomley, M. E., *The Design of Small Properties*. Macmillan Company, New York City, N. Y.
- Johnson, L. H. *Foundation Planting*. A. T. De La Mare Co., New York City, N. Y.
- Cridland, R. B., *Practical Landscape Gardening*. A. T. De La Mare Co., New York City, N. Y.
- Ramsey, L. W. and Lawrence, C. H., *The Outdoor Living Room*. The Macmillan Company, New York City, N. Y.
- Orloff, H. S. and Raymore, H. B., *New Gardens for Old*. Doubleday, Doran and Co., Inc. Garden City, N. Y.
- Volz, E. C., *Home Flower Growing*. Macmillan Company, New York City, N. Y.
- Hottes, A. C., *Practical Plant Propagation*. A. T. De La Mare Co., New York City, N. Y.

- Barron, Leanord, et. al., *The Complete Book of Gardening*. Doubleday, Doran and Co., Garden City, N. Y.
- Bailey, L. H., *The Nursery Manual*. Macmillan Company, New York City, N. Y.
- Hottes, A. C., *See How to Plant Your Home Grounds*. Better Homes and Gardens, Des Moines, Iowa.
- White, E. A., *Flower Arrangement*. A. T. De La Mare Co., New York City, N. Y.
- Biddle, Mrs., *How to Arrange Flowers*. Doubleday, Doran and Co., Garden City, N. Y.

Bulletins

- Planning the Farmstead*, U.S.D.A. Farmers Bulletin 1132.
- Beautifying the Farmstead*, U.S.D.A. Farmers Bulletin 1087.
- Planting and Care of Street Trees*, U.S.D.A. Farmers Bulletin 1209.
- Trees, Shrubs and Plants for Rural Planting of Recreation Places*, U.S.D.A. Farmers Bulletin 1388.
- Windbreaks on the Farm*, U.S.D.A. Farmers Bulletin 1405.
- Rural Planting—the Village*, U.S.D.A. Farmers Bulletin 1441.
- Improving the Small Home Ground*. Ill. Ext. Circ. 314.
- Transplanting Trees and Shrubs*, U.S.D.A. Farmers Bulletin 1591.
- Insect Enemies of the Flower Garden*, U.S.D.A. Farmers Bulletin 1495.
- Diseases of Ornamental Plants*, N. J. Exp. Sta. Bul. 226.
- Plant Propagation*, U.S.D.A. Farmers Bulletin 157.
- Propagation of Trees and Shrubs*, U.S.D.A. Farmers Bulletin 1567.
- Growing Annual Flowering Plants*, U.S.D.A. Farmers Bulletin 1171.
- Herbaceous Perennials*, U.S.D.A. Farmers Bulletin 1381.
- Making the Home Lawn*, Minn. Spec. Bul. 130.
- Grafting and Budding*, Minn. Spec. Bul. 151.
- Landscape Planting*, Minn. Spec. Bul. 193.
- Planting the Standard Windbreak*, Minn. Spec. Bul. 168.
- Flowers and Other Material for Winter Bouquets*, L. Sando, Horticulture Division University Farm. Mimeographed publication.
- Community Flower Shows*, L. E. Longley and L. Sando, Horticulture Division, University Farm. Mimeographed publication.
- Landscaping the Farmstead*, Vocational Education Bulletin 189, U. S. Dept. of the Interior. Office of Education.