



1  **Getting Started With Orchids**

2  **About Orchids**

- The orchid family is the largest plant family
- Over 35,000 species
- Every country in the world and every state in the United States, including Alaska, has orchids!

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4  **Orchids in Wisconsin**

- 46 species in 18 genera
- All terrestrial

5  **Vanilla Orchids**

- 60 or so species
- Throughout the tropical Americas, including Florida and the Bahamas
- All are vines, several are leafless

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6  **Vanilla Orchids**

- *Vanilla planifolia* (= *V. fragrans*, *V. vanilla*) grown commercially
- Yellow-green flowers
- Produces fruit when >10 feet
- Vanilla is the orchid "fruit"
- Harvested before it is fully ripe – referred to as vanilla beans
- 6-9" pods are fermented and cured

7  **Where Orchids Are Found**









8  **Orchids In Nature**










- Epiphytes – grow on trees (NOT parasites!)
- Lithophytes – on rock surfaces
- Saprophytes – grow in decaying vegetation on the forest floor
- Terrestrials – grow in soil or sand

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9  **Orchid Flowers**

- Pollinated by
 - Insects
 - Birds
 - Bats
- Often long-blooming
- Some fragrant
 - Raspberry, coconut, lilac, citrus, perfume
- Selections and hybrids
 - *Maxillari(ell)a tenuifolia*

- 10  **Orchid Propagation (Sexual)**
- Takes several years from seed to flowering
 - Seeds are sown on agar in a flask
 - Germinate into protocorms
 - Eventually grow into seedlings
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- 11  **Orchid Propagation (Asexual)**
- Division of large plants
 - Keikis (small plantlets that develop on old stems)
- 12  **Orchid Growth Habits**
- Monopodial (“one-footed”)
 - Only one main stem
 - New growth from the crown of the plant
 - Aerial roots common
 - *Phalaenopsis, Vanda*
- 13  **Orchid Growth Habits**
- Sympodial (“feet together”)
 - New seasonal growths
 - Pseudobulbs
 - Rhizome with lateral growth pattern
 - *Cattleya, Oncidium*
- 14  **Orchid Structure: Roots**
- Characteristic epidermis (velamen) prevents water loss
 - For water and mineral uptake
 - To attach to substrate
- 15  **Growing Orchids**
- If you can grow houseplants,
you can grow orchids!*
- 16  **Orchid Care: Potting Medium**
- Various substrates, plain or in mixes
 - Bark (fir or redwood)
 - Crumbled charcoal
 - Pebbles
 - On tree-fern or cork slabs
 - Drains well
 - Allows air penetration
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- 17  **Orchid Care: Watering**
- Water thoroughly (until water comes out bottom of pot)
 - Allow medium to dry out between watering
 - Schedule will vary depending on pot, medium, temp, light
 - Use rainwater if possible

- 18  **Orchid Care: Temperature**
Classification based on preferred winter minimums
- 19  **Orchid Care: Humidity**
- 50% or higher
 - Enhances flowering
 - Increase with humidifier or set on gravel trays with water
- 20  **Orchid Care: Light**
- Need optimum for flowering
 - Three categories
 - High
 - Medium
 - Low
 - Light to medium green-yellow leaves, NOT dark green
- 21  **Orchid Care: Light**
- South or east windows
 - Shadow test
 - Artificial light
 - Be careful of sunburn when changing locations!
- 22  **Orchid Care: Fertilizing**
- Potting medium
 - Recommended
 - Diluted 20-20-20 weekly
 - Blossom-booster (more P, less N) in fall
 - Less is better if you're unsure
- 23  **Orchid Care: Repotting**
- Why?
 - Plant has outgrown its pot
 - Medium is degraded
 - When?
 - Just as new roots show
 - When roots are 5-6" long
- 24  **Orchid Care: Repotting**
- How?
 - Remove plant
 - Divide if necessary
 - Replace in appropriate sized pot
- 25  **Suggested Orchids: *Phalaenopsis***
- Monopodial type
 - Low light intensity
 - Warm temperatures
 - Long-lasting flowers
- 26  **Suggested Orchids: *Cattleya* Types**

- Sympodial growth
- Medium to high light intensity
- Intermediate temperatures
- Numerous species and hybrids

27  **Suggested Orchids: *Dendrobium***

- Sympodial growth
- Varying light requirements
- Intermediate temperatures
- Some have arching sprays of flowers; others bunches at the nodes of stems

28  **Suggested Orchids: *Cymbidium***

- Sympodial growth
- High light intensity
- Cool temperatures
- Attractive, grassy foliage and long-lasting, waxy flowers

29  **Suggested Orchids: *Paphiopedilum***

- Semi-terrestrial, monopodial growth
- Medium light intensity
- Intermediate temperatures
- Exotic blooms

30  **Purchasing Orchids**

- Discount retailers
- Local nurseries
- Specialty nurseries
- Mail-order

31  **Selecting an Orchid**

- The Plant
 - In proportion to the container
 - Healthy roots
 - Clean and unblemished
 - Turgid and medium green
 - Free of visible pests

32  **Selecting an Orchid**

- The Flowers
 - Lustrous and held well above the foliage
 - On a strong, well-supported spike
 - Unblemished and free of fungal spotting
 - Have some buds yet to open
 - Are appealing to you

33  **Learning More About Orchids**

- Books
- Websites
- Orchid growers
- Orchid shows

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34  **Regional Orchid Shows**

- Orchid Quest
Late January / early February
Madison, WI

- Northeastern Wisconsin Orchid Society Show
Early March
Green Bay, WI