The UF/IFAS Extension Office is available to help you with your farming, gardening, landscaping, and 4-H youth development needs by providing educational programming, free consultations and information. Contact us at:

UF/IFAS Extension Baker County
1025 W. Macclenny Ave. Macclenny, FL 32063
Phone: (904) 259-3520 Email: baker@ifas.ufl.edu
Hours: M—F 8:30 am to 5:00 pm (Closed Noon to 1:00 pm for Lunch)

County Agents
Alicia Lamborn Horticulture Agent
Shaina Spann 4-H Youth Development Agent
Alicia Halbritter Agriculture & Natural Resources Agent

Wishing you all a happy holiday season from all of us at the Extension Office!

From Alicia, Shaina, Alicia, Gloria, Kailee, and Hunter.
Highlights in Horticulture

Bulbs & Bulb-like Plants
We often refer to any plant which produces underground storage organs as bulbs. But not all bulbous plants are true bulbs. Some true bulbs such as narcissus, amaryllis, and onions are tunicate bulbs, meaning they are protected from drying and mechanical injury by dry and membranous outer scales called a tunic. Other true bulbs such as lilies are called non-tunicate or scaly bulbs because their outer scales are succulent and separate, giving the bulb a scaly appearance. Other specialized underground storage organs include corms (gladiolus), tubers (caladium), tuberous roots (dahlia and ranunculus), and rhizomes (calla and canna lilies).

General Care of Bulbs
Control weeds and retain moisture with a 2-inch layer of mulch over the bed at planting time. Fertilize once or twice during the growing season using 1 to 1.5 pounds of 12-4-8 per 100 sq ft of bed. Keep soil moderately moist at all times. Plantings should not suffer from lack of water during times of growth and flowering. A good cultural practice is to remove dead blooms before seeds are produced. Flowering the following season can be reduced considerably if seeds are allowed to set, and removing dead blooms may also prevent disease problems. Some bulbs will bloom poorly if they become crowded. Digging and replanting encourages more uniform flowering and larger flowers.

Bulbs for Winter
These commonly grown bulbs and bulb-like plants can be planted and/or enjoyed during the Florida winter months.

<table>
<thead>
<tr>
<th>Name</th>
<th>Best Time to Plant</th>
<th>How To Plant</th>
<th>Bloom Season</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amaryllis</td>
<td>SEPT - JAN</td>
<td>Tip at soil surface; 10-12 inches apart; partial shade</td>
<td>Spring</td>
<td>If grown in pots, plant so half of bulb is out of soil.</td>
</tr>
<tr>
<td>Amazon Lily</td>
<td>FEB - MAY</td>
<td>Tip on soil surface; 3-4 bulbs per 8-inch pot; partial shade</td>
<td>Winter</td>
<td>Best grown in pots - blooms more freely with confined roots; keep very moist during active growth.</td>
</tr>
<tr>
<td>Aztec Lily</td>
<td>ANY TIME OF YEAR</td>
<td>3-4 inches deep; 8 inches apart; full sun</td>
<td>Spring &amp; Summer</td>
<td>Will bloom several times if allowed to become crowded and dry out occasionally. Can be grown in pots.</td>
</tr>
<tr>
<td>Cala Lily</td>
<td>SEPT - JAN</td>
<td>3-4 inches deep; 1-2 feet apart; full or partial sun</td>
<td>Spring</td>
<td>Soil should be kept moist. Rhizomes can be potted in containers if moisture level is carefully controlled.</td>
</tr>
<tr>
<td>Crinum</td>
<td>ANY TIME BUT WINTER IS BEST</td>
<td>Bulb neck above ground; 12-36 inches apart depending on species; full or partial sun</td>
<td>Spring &amp; Summer</td>
<td>Soil should be well-drained although established plants can tolerate flooding.</td>
</tr>
<tr>
<td>Hurricane Lily</td>
<td>NOV - JAN</td>
<td>3-4 inches deep; 8-8 inches apart; full sun to light shade</td>
<td>Late Summer &amp; Early Fall</td>
<td>Water at planting then again when growth slows. Should be dug when crowded.</td>
</tr>
<tr>
<td>Narcissus</td>
<td>SEPT - DEC</td>
<td>4 inches deep; 8 inches apart; full sun to partial shade</td>
<td>Late Winter &amp; Spring</td>
<td>Cultivars that do well in Fl include Paperwhite, Erincheer, Ice Follies, Soleil d’Or, Thalia, and others.</td>
</tr>
<tr>
<td>Snowflake</td>
<td>SEPT - NOV</td>
<td>4 inches deep; 4-6 inches apart; full sun</td>
<td>Late Winter &amp; Early Spring</td>
<td>Enrich soil with organic matter at planting.</td>
</tr>
<tr>
<td>Zephyr Lily</td>
<td>SEPT - MARCH</td>
<td>1-2 inches deep; 3 inches apart; full or partial sun</td>
<td>Spring to Fall</td>
<td>Enrich soil with organic matter at planting. Can also be grown as potted plants.</td>
</tr>
</tbody>
</table>
Heat Synching Protocols for Cattle

Heat Synchronization is the process of restarting the 21 day estrous cycle in heifers or cows with medicinal manipulations to tighten the calving season of a particular herd.

Benefits
1. Shorter Calving Season—More females calving within the first 21 days of the calving season.
2. Higher Value Calves—Females calving early in the season means larger, higher value calves at weaning.
3. Reduced Calf Management—A more uniform age of your calf crop reduces producer labor in calf processing.

Preparing the Herd
Heifers need to have a reproductive tract score assessment completed if they are expected to calve at 2 years old, this will ensure they are prepared to carry a pregnancy before heat synchronization is started.

Protocols

PGF2 Alpha
$1-$2/female
One Chute Trip, one shot (less labor)
Cheap but not good for heifers, brahman influenced, or cows with poor nutrition.
*PGF2 Alfa will cause abortion in cows that are already pregnant, do not use this protocol on cows that have been recently exposed to bulls.

MGA Based
$8-$13/female
Synthetic progesterone added to feed for 7-14 days. Protocol can be improved with shots of GnRH (day 0) and PGF2 Alpha (day 14)
More effective than PGF2 Alpha alone, although not ideal way of drug administration (through feed).

CIDR Based
$15-$30/female
Intravaginal device that delivers progesterone. Most effective protocol includes GnRH + PG shot and CIDR.

Bulls or AI
If you are using artificial insemination, all cows could be synched at the same time. Clean up bulls can be utilized to breed cows that may not get pregnant with the synch protocol.

If live-cover is to be used, more bulls may be needed than for a typical breeding season. Synched herds should have at least 1 bull per 10-15 females in the first week of highly synchronized programs.
Congratulations to all of our Holiday Bake-Off and Chili Cook-Off participants! We had an awesome turnout for the Holiday Bake-Off and Chili Cook-Off. Below are the winners from each category.

<table>
<thead>
<tr>
<th>Bread</th>
<th>Rylee Harvey</th>
<th>Amish Cinnamon Bread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honey</td>
<td>Sadie Harvey</td>
<td>Honey Flan</td>
</tr>
<tr>
<td>Lite</td>
<td>Sadie Harvey</td>
<td>Chocolate Dipped Apricots</td>
</tr>
<tr>
<td>Brownies &amp; Bars</td>
<td>Sarah Surrency</td>
<td>Christmas Tree Brownies</td>
</tr>
<tr>
<td>Candies</td>
<td>Olivia Lamborn</td>
<td>Christmas Tree Bark</td>
</tr>
<tr>
<td>Decorated Cake</td>
<td>Caroline Clark</td>
<td>Fireplace Cake</td>
</tr>
<tr>
<td>Cake</td>
<td>Abigail Iverson</td>
<td>Snowman Carrot Cake</td>
</tr>
<tr>
<td>Cookies</td>
<td>Autumn Dugard</td>
<td>Sugar Cookie Truffles</td>
</tr>
<tr>
<td>Cupcakes</td>
<td>Schaelynn Dugard</td>
<td>Smore Cupcakes</td>
</tr>
</tbody>
</table>

Holiday Bake-Off Winner: Abigail Iverson!
Chili Cook-Off Winner: Courtney Brown

4-H Club Meetings & Events
- January 8– Cloverbuddies, 4pm, 4-H Classroom
- January 23– Livestock Club, 6pm, Ag Center Auditorium
- February 3– Insectathon, Gainesville

We need volunteers for STEAM, Fitness, and Livestock Clubs! Please reach out if you’re interested.
For Baker County 4-H to grow we need more opportunities for youth and for that to happen, we need more volunteers!
2023 Peanut Butter Challenge Success

Thank you for helping us collect and donate 126 jars or 124.5 lbs. of peanut butter! All donations remained local and were dropped off to Samaritan Food Bank.

2023 Newsletter Survey Winner

Congratulations Erica Weber

We appreciate everyone’s support and feedback!
Online Courses from UF/IFAS Extension Baker County

**Butterfly Gardening**
Learn the basic garden design elements for a successful butterfly garden.

**Growing Strawberry Plants**
Includes variety selection, planting, and care through the strawberry growing season.

**Growing Backyard Blueberries & Blackberries**
Variety selection, planting, and maintenance, plus a section on raspberries.

**Backyard Poultry Basics**
A beginner's guide to raising chickens.

**Selling Backyard Poultry Products**
Learn how to start a business selling chickens, other poultry, or poultry products.

Register Here

Register Here

Register Here

Register Here

Register Here

Register Here

**EDIBLES TO PLANT IN**

**December**

**North**
- Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Sugarcane, Swiss Chard
- Celery, Mustard, Spinach
- Carrots, Onions (bunching), Radish, Turnips

**Central**
- Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Endive, Kale, Kohlrabi, Lettuce, Sugarcane, Swiss Chard
- Celery, Mustard, Pineapple, Potatoes, Spinach
- Carrots, Onions (bunching), Peas (English), Radish, Turnips

**South**
- Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive, Kale, Kohlrabi, Lettuce, Peppers, Sugarcane, Swiss Chard, Tomatillo, Tomatoes, Tropical Spinaches
- Amaranth, Calabaza, Celery, Long Squash, Luffa, Mustard, Pineapple, Potatoes, Seminole Pumpkin, Spinach, Seminole Pumpkin, Sweet Potatoes
- Beans (bush, lima, pole), Cantaloupes, Carrots, Corn, Cucumbers, Onions (bunching), Peas (English, southern), Radish, Squashes, Turnips, Watermelon

For more information, please visit GardeningSolutions.ifas.ufl.edu