# GRAVES COUNTY AGRICULTURE & NATURAL RESOURCES NEWS

April 2025



GRAVES COUNTY COOPERATIVE EXTENSION SERVICE 4200 US HWY 45 MAYFIELD, KY 42066 (270)247-2334 GRAVES.EXT@UKY.EDU

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## Agent Notes

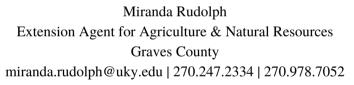
### April 2025



March came and went in a flash and we skipped a month with this newsletter, but we are back on track! Thanks to the warm weather, our farms are bustling in between the adventures that Mother Nature sends our way. I'm writing this on April 2nd when we are all in the center of what looks to potentially be some very concerning weather with serious tornado threats and historic floods. Please be safe and reach out if there is a need that extension can fulfill in the aftermath. Here's to praying it's all a real big disappointment!

I hope you will take the time to go through this newsletter to read the articles and see what programs and events may interest you. If you have any questions or concerns, don't hesitate to reach out!

Miranda Budelph



### **Upcoming Events:**

- April 15th Farmers Market Vendor Meeting 5:30pm Graves Co. Extension
- April 29th Growing Victory Gardens 5:30pm Graves Co. Extension
- May 13th Wheat Field Day 9am Caldwell Co. Extension
- May 29th Alpha-gal Syndrome Webinar 6pm See flyer below!

More events are always being added!

Cooperative Extension Service

Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development Community and Economic Development MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Disabilities accommodated with prior notification.





## Announcements

### April 2025

**K** Cooperative Extension Service

Cooperative **Extension Service** 

## GROWING VICTORY GARDENS



Come and join us to learn about the history of Victory Gardens and how we can use them today to increase selfsufficiency!

**APRIL 29, 2025** 5:30 PM **GRAVES COUNTY EXTENSION OFFICE** 

Cooperative **Extension Service** riculture and Natural Re mily and Consumer Scie

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Laurel Oak Garden Club Members' Plant Sale Saturday, May 10, 2025 9:00am- 11:00am Location:

Graves County Extension Office 4200 US-45, Mayfield, KY

Come and Shop for: Healthy Outdoor Plants, Yard Art, Growing Tips, and Perfect Mother's Day Gifts

## Webinar Event Living with Alpha-gal Syndrome

Learn more about AGS (red meat allergy) and how to reduce your risk with University of Kentucky **Cooperative Extension** 

#### **Topics Covered**

✓ AGS basics

✓ Tick bite prevention

✓ Diet & lifestyle management

🗸 Q/A session



Thursday, May 29th 6-7:30pm CDT 7-8:30pm EDT **Register Now!** 

ukfcs.net/AgS

Cooperative Extension Service iculture and Natural R nily and Consumer Scie





### Farmers Market Vendor Meeting

Interested in being a vendor for the new Mayfield Downtown Farmers Market? Come find out all you need to know and ask questions!

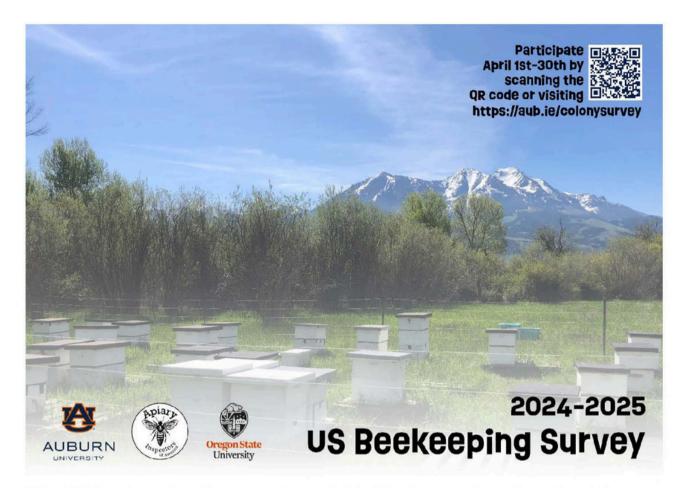
**Tuesday, April 15** 5:30 pm Graves County **Extension Office** 

Graves County Agriculture & Natural Resources

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## Announcements

### April 2025



#### The US Beekeeping Survey: a 'newish' effort to track colony health

Agostina Giacobino, Nathalie Steinhauer\*, Selina Bruckner & Geoff Williams Department of Entomology and Plant Pathology, Auburn University, Auburn, AL \*Department of Horticulture, Oregon State University, Corvallis, OR

If you are reading this during the month of April, then the US Beekeeping Survey is **Open**, and inviting beekeeper participation. This is only the second year of our Survey, so if you aren't familiar with us we won't be too disappointed. You can think of us a follow-up to the Bee Informed Partnership's annual Colony Loss and Management Survey - many of our questions are aligned to that survey so that we can integrate our results with theirs. When BIP shut down in early 2024, we joined forces with national stakeholders like AHPA, ABF, and AIA to ensure that independent, long-standing colony loss and management monitoring efforts could continue. Not only are these data important to inform the industry, the general public, and decision-makers on the state of the beekeeping industry, but it also helps us identify important factors that are connected to honey bee health. For example, data from previous surveys have shown varroa and comb management matters (Steinhauer et al. 2021. Sci. Total Environ. 753: 141629). Given the massive losses that we are facing at the time of writing, plus the high losses that we documented among commercial beekeepers during 2023/24, contributing to our monitoring efforts are as important as ever so that we can properly communicate beekeeper experiences to decision makers and try to do our part to limit future losses. In addition to thanking the great collaboration we have with AHPA, ABF, and AIA, we want to give a shout out to the One Hive Foundation, Project Apis m, and the National Honey Board, for supporting our efforts to reignite this Survey last year. To see last year's survey results, and to participate during the month of April, go to https://aub.ie/colonysurvey

## Grains

### Tariffs and Trade: The Cost to U.S. Agriculture

Dr. Grant Gardner, UK Extension Economist

Tariffs are a government tool used to raise the price of foreign products, encouraging consumers to buy domestically produced goods. They serve multiple purposes, including protecting local industries from foreign competition, generating government revenue, and responding to unfair trade practices. This article examines the US export portfolio for corn, soybeans, and wheat, highlighting key countries where retaliatory tariffs could lead to price volatility and losses in agricultural commodities.

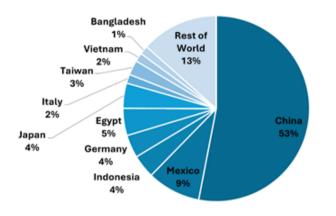


Figure 2: Average US Soybean Exports by Destination (2020-2024), Source: Data Source: U.S. Census

As of March 15, the US has enacted tariffs on Canada, Mexico, China, and the European Union—nations that collectively purchase nearly 54% of US corn exports, 62% of soybean exports, and 24% of wheat exports (2020–2024 average). Additional tariffs have been proposed against Japan, which accounts for 18% of US corn exports, 4% of soybean exports, and 10% of wheat exports. As retaliatory tariffs take effect, US commodities become more expensive

internationally which reduces exports and increases domestic supplies, which in turn drives domestic prices down. While these countries may not stop purchasing US crops entirely, they are likely to shift demand toward competing suppliers such as Brazil, Argentina, and the Black Sea region.

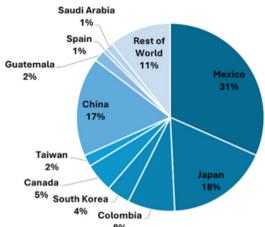


Figure 1: Average US Corn Exports by Destination (2020-2024), Source: Data Source: U.S. Census

While tariffs may seem beneficial by offering protection, generating revenue, or as a negotiating tool for broader policy issues, they create winners and losers. When the US imposes tariffs, other countries often retaliate, targeting industries reliant on exports. In many cases, US agriculture bears the brunt of these actions.

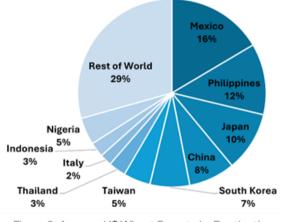


Figure 3: Average US Wheat Exports by Destination (2020-2024), Source: Data Source: U.S. Census

Regardless of political perspective, tariffs disrupt free trade, undermining comparative advantage and efficiency. For example, the US holds a comparative advantage in corn production relative to Canada, while Canada holds a comparative advantage in potash production. When tariffs are imposed, the domestic supply of efficiently produced US corn rises, pushing US prices lower. Meanwhile, retaliatory tariffs restrict access to efficiently produced Canadian goods, such as potash, causing their US prices to increase.

While tariffs may provide short-term benefits to certain industries and could serve long-term policy goals, their immediate impact on US agriculture is overwhelmingly negative.

Citation: Gardner G., 2025. Tariffs and Trade: The Cost to US. Kentucky Field Crops News, Vol 1, Issue 3. University of Kentucky, March 14, 2025.

## Kentucky Agriculture Training School 2025 Schedule

#### March 20: Drone Sprayer Training

This class is designed for agricultural professionals and producers to learn about dispensing fungicides with drone sprayers, nozzle selection and droplet sizes, and information for certified commercial/non-commercial and private applicators.

#### April 10: Soil Properties Workshop (Richmond, KY)

We will examine soil pits with distinctly different profile properties to discuss how they will influence water and nutrient retention and delivery.

#### May 15: Crop Scouting Workshop

Training is comprised of individual scouting sessions in the areas of disease, growth staging, weed identification, and soil nutrition. This is a beneficial workshop for new and experienced producers, agriculture interns as well as a great refresher for others.

#### June (TBD): Planter Clinic

Review and identify consequences on plant performance that resulted from improper planter settings.

#### July 24: KY High School Crop Scouting Competition

Teams of 4-6 students will compete in hands-on, interactive field scouting exercises related to corn, soybean and tobacco rotating through various stations.

#### August 28: Field Crop Pest Management and Spray Clinic

A hands-on workshop that will cover spray technology, fungicide application, herbicide symptomology, and more.

For information and registration for KATS Workshops visit<u>kats.ca.uky.edu</u> or contact Lori Rogers <u>lori.rogers@uky.edu</u> 270-365-7541 ext 21317.



#### **Timely Tips**

Dr. Les Anderson, Beef Extension Professor, University of Kentucky

#### **Spring-Calving Cows**

- Observe spring-calving cows closely. Check cows at least twice daily and first-calf heifers more frequently than that. Be ready to assist those not making progress after 1 to 2 hours of hard labor. Chilled calves should be dried and warmed as soon as possible.
- See that each calf gets colostrum within an hour of birth or administer colostrum (or a commercial colostrum replacement) with an esophageal feeder, if needed.
- Identify calves with ear tags and/or tattoos while calves are young and easy to handle and record birthdate and Dam ID. Commercial male calves should be castrated and implanted as soon as possible. Registered calves should be weighed in the first 24 hours.
- Separate cows that have calved and increase their feed. Energy supplementation to cows receiving hay is necessary to prepare them for rebreeding. For example, a 1250 lb cow giving 25 lb/day of milk would need about 25 lb of fescue hay and 5 lb of concentrate daily to maintain condition. If you need to go from a condition score of 4 to 5, you will need to add about 2 more lb of concentrate. Cows must be in good condition to conceive early in the upcoming breeding season.
- Watch for calf scours! If scours become a problem, move cows that have not calved to a clean pasture. Be prepared to give fluids to scouring calves that become dehydrated. Consult your veterinarian for advice and send fecal samples to diagnostic lab to determine which drug therapy will be most effective. Try to avoid feeding hay in excessively muddy areas to avoid contamination of the dams' udders.
- Continue grass tetany prevention. Be sure that the mineral mix contains high levels (~15%) of magnesium and that cows consume adequate amounts. You can feed the UK Beef IRM High Magnesium mineral.
- Plan to vaccinate calves for clostridial diseases (Blackleg, Malignant Edema) as soon as possible. You might choose to do this at the prebreeding working in late April or early May.
- Obtain yearling measurements on bulls and heifers this month (weight, height, pelvic area, scrotal circumference, ultrasound data, etc.) if needed for special sales. Heifers should be on target to be cycling by the start of the breeding season.
- Prepare bulls for the breeding season. Increase feed if necessary to have bulls in adequate condition for breeding. Obtain Breeding Soundness Evaluation (BSE) on bulls, even if they were checked last breeding season. Only use bulls that pass the BSE.
- Finalize plans for your spring breeding program. Purchase new bulls at least 30 days before the breeding. Order semen now, if using artificial insemination.

#### Fall-Calving Cows

- Bull(s) should be away from the cows now!
- Plan to pregnancy check cows soon. Contact your herd veterinarian to schedule. You can also blood test for pregnancy as early as 30 days after bull removal.
- Creep feed calves with grain, by-products, or high-quality forage. Calves will not make satisfactory gains on the dam's milk alone after about 4 mos. of age since there isn't much pasture in March, fall calves need supplemental nutrition. Consider creep grazing on wheat pasture, if available. Calves can also be early weaned. Be sure that feed bunks are low enough that calves can eat with the cows.

## Beef

#### Fall-Calving Cows Cont..

- Calves intended for feeders should be implanted.
- Consider adding weight and selling your fall calves as "heavy" feeder calves. Keep them gaining!

#### <u>General</u>

- Repair fences, equipment, and handling facilities.
- If you have a dry, sunny day, buse chain-link harrow to spread manure in areas where cattle have overwintered. This may be done in conjunction with renovation.
- Renovation and fertilization of pastures should be completed.
- Start thistle control. They can be a severe problem in Kentucky pastures. Chemical control must be done early to be effective.
- Watch for lice and treat if needed.



## Horticulture

### **Recommendations for Starting Disease-Free Vegetable Transplants**

Home gardeners and commercial growers likely have placed their seed orders or have last year's seed saved. Over the next few weeks, many will plant those seeds in order to establish transplants for spring and summer gardens. In some cases, those seeds may germinate, wither, and die (Figure 1). In other cases, plants may establish but become diseased shortly after transplanting. This damping-off can be caused by a number of soilborne fungi or fungus-like water molds, often the result of infected seed or from contaminated soil or containers. More information on damping-off diseases can be found in the publication *Damping-off of Vegetables & Herbaceous Ornamentals* (PPFS-GEN-03). Numerous steps can be taken to prevent the occurrence of seedling diseases.



#### **Purchase Pathogen-Free Seed**

When purchasing seeds from suppliers, select seeds that are certified free of disease-causing pathogens. Different sellers may have different seed-testing practices. Information about whether or not seeds are certified disease-free can be found online, in seed catalogs, or on seed packets.

#### **Heat-Treat Seed**

Many home gardeners choose to save seeds from year to year, particularly in the case of heirloom varieties. However, pathogens may be present on the exterior and/or interior of seeds, even if not visible. This may also be true of purchased seeds that are not certified disease-free. Hot water seed treatment may be used for certain types of vegetables to kill pathogens. In this process, seeds are pretreated in a water bath at 100°F for five minutes. Seeds are then transferred to a second water bath set at a specified temperature, typically between 118 and 125°F, for a specified period of time. The temperature and treatment time varies depending on the type of seed being treated. Reference the publication *Disease Management Practices for Saved Vegetable Seeds*. There are certain types of vegetable seeds that cannot be heat treated, such as peas, beans, and most cucurbits; seed pretreated with fungicides also should not be hot water-treated.

#### Surface Sterilize Transplant Trays

Reused transplant trays can harbor disease-causing pathogens. If trays are reused, all soil and plant debris should be removed. Trays can then be sterilized using a solution of one part household bleach to nine parts water (10% bleach) or a disinfectant. Pots and metal stakes should be sterilized in a similar way. For additional information on cleaning and disinfection of trays can be found in the <u>Cleaning & Disinfecting</u> <u>Home Garden Tools & Equipment</u> and <u>Cleaning & Sanitizing Commercial Greenhouse Surfaces</u> publications.

#### **Pasteurize Planting Media**

Planting media can also contain pathogen propagules that may infect seeds or seedlings. Always use new planting media for starting seeds, as most purchased media is typically pathogen-free. If media is suspected of being contaminated, pasteurization (heating up soil) can eliminate pathogens. To pasteurize, put well-moistened soil in a metal container (such as a disposable cake pan) and heat at 200°F for 46 to 60 minutes, or microwave in a glass pan for 30 seconds, mix, and repeat until soil is evenly heated (approximately 3 minutes total time).

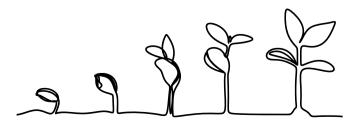
#### **Additional Resources**

- Disease Management Practices for Saved Vegetable Seeds (PPFS-VG-09)
- Home Vegetable Gardening in Kentucky (ID-128)
- Gardening in Small Spaces (ID-248)
- High Tunnel Planting Calendar (CCD-FS-9)
- Vegetable Production Guide for Commercial Growers (ID-36)
- Cleaning & Disinfecting Home Garden Tools & Equipment (PPFS-GEN-17)
- Cleaning & Sanitizing Commercial Greenhouse Surfaces (PPFS-GH-07)
- Cornell University Managing Pathogens Inside Seed with Hot Water (Link)
- Damping-off of Vegetables & Herbaceous Ornamentals (PPFS-GEN-03)

Published in Kentucky Pest News on March 25, 2025

Revised by Nicole Gauthier, Plant Pathology Vegetable Extension Specialist

Original Article by Kim Leonberger, Plant Pathology Extension Associate, and Emily Pfeufer, Former University of Kentucky Plant Pathology Extension Specialist



## Weather Notes



#### Preparing for Severe Weather: What You Need to Know

Tony Edwards - National Weather Service Charleston, WV



In parts of the Deep South, the risk of severe thunderstorms persists throughout the winter months. For us here in the Bluegrass State, however, we're quickly approaching a time when thunderstorms become both more frequent and more intense. As winter storms make way for spring, severe weather- including damaging winds, hail, and even tornadoes- becomes the primary concern.

As I write this article in mid-March, much of the Bluegrass State is already facing the threat of severe weather, a common occurrence for this time of year. Data from the National Weather Service's Storm Prediction Center reveals that the likelihood of severe weather increases as march progresses, peaking in mid-June at around 4%. This means, based on historical data alone, residents of Kentucky have a 4% chance of experiencing damaging winds, hail larger than quarters, or a tornado within 25 miles of their home in the middle of June! The risk then significantly decreases by mid-September.

Given this, now is the time to start preparing for the upcoming severe weather season. The first step is simple: **be aware** that severe weather is a real possibility. Make checking your local forecast part of your daily routine to stay informed and prepared.

• Did You Know? The national Weather Service (NWS) offices that serve Kentucky offer a 24-hour recoreded weather forecast, and in many cases, you can even speak to a live person if you have questions about the forecast. Contact your local NWS office to learn more!

#### **Preparing for Severe Weather**

When severe weather is in the forecast, it's essential to take action ahead of time. Start by ensuring you have access to **emergency supplies**. This is particularly important if you live in an area prone to flooding and might need to evacuate on short notice.

Make sure you know where your **safe spaces** are. In most cases, this is the lowest floor of your house- preferably a basement. If you don't have a basement, an interior room with no windows and doors will suffice. If you own livestock, consider moving them to a protected area, especially if hail is in the forecast.

#### Stay Informed on Severe Weather Days

When severe weather is expected, it's crucial to stay vigilant. Be prepared to adjust outdoor plans if necessary and remain alert to weather updates.

• Did You Know? NOAA Weather Radios are specialized devices designed to broadcast weather information and activate alarms when severe weather alerts are issued. Many models run on battery or solar power and do not included AM/FM radio. You're likely n ear a transmitter, making this a reliable option to stay updated. Check out these handy radios at your local store to keep your home prepared.

## Weather Notes

April 2025



#### Preparing for Severe Weather: What You Need to Know

Tony Edwards - National Weather Service Charleston, WV



#### Understanding Watches and Warnings

- Severe Thunderstorm and Tornado Watches: Issued when conditions are favorable for severe weather or tornadoes in the near future.
- Severe Thunderstorm and Tornado Warnings: Issued when severe weather or tornadoes are occurring or imminent. This is when you need to act fast!

When a warning is issued, take shelter immediately. You may only have seconds to respond, so knowing what to do and where to go is essential.





## Recipes

### April 2025



### Balsamic Veggie Pasta

4 tablespoons olive oil, divided

2 cloves garlic, minced
1 small zucchini, chopped
1 small yellow squash, chopped

In large skillet, heat 1 tablespoon

minced garlic and cook one minute,

until fragrant. Add chopped zucchini,

squash, tomatoes, and green onions,

and cook until tender. Add salt and

whisk together 3 tablespoons olive oil, balsamic vinegar, and dried basil.

Stir in zucchini, squash, tomatoes, and green onions. Let sit for 5 to 10

minutes. In a large pot, cook pasta

pepper to taste. In a large bowl,

olive oil over medium heat. Add

2 tomatoes, chopped ½ cup green onions, chopped Salt and pepper to taste 2 tablespoons balsamic vinegar 1 teaspoon dried basil 8 ounces whole wheat pasta 1 tablespoon

Parmesan, grated

in salted water about 7 minutes, until al dente. **Drain**. **Toss** pasta with vegetable mixture until incorporated. **Sprinkle** with Parmesan cheese. **Serve** warm.

Yield: 4, 2-cup servings

Nutritional Analysis: 390 calories, 16 g fat, 3.5 g saturated fat, 0 mg cholesterol, 200 mg sodium, 52 g carbohydrate, 1 g fiber, 6 g sugars, 0 g added sugars, 10 g protein

# Kentucky Summer Squash

SEASON: June through October. **NUTRITION FACTS:** Squash is low in calories. One cup of raw squash contains only 20 calories. It contains vitamins A and C, and is naturally free of fat, cholesterol, and sodium. SELECTION: Popular summer squashes include yellow crookneck, yellow straightneck, zucchini, cocozelle, and pattypan. Pick or purchase summer squash when they are small and tender, and eat both the skin and the seeds. The skin holds many of the nutrients so do not peel. Harvest squash when it is 6 to 8 inches in length. Pattypan squashes are ready when they are 3 to 4 inches in diameter or less. STORAGE: Store unwashed squash in plastic bags in the crisper drawer of the refrigerator. Wash the squash

just before preparing. The storage life of summer squash is brief. Plan to use it within two to three days. **PREPARATION:** Summer squash is a mild-flavored vegetable that combines well with herbs and seasonings. Try it with basil, allspice, rosemary, and marjoram. Cook summer squash as a side dish or use it in stews, casseroles, and main dishes. Summer squash can be grilled, steamed, boiled, sautéed, fried, or used in stir-fry recipes. PRESERVING: Select small squash with small seeds and a tender rind. Wash and cut into 1/2-inch slices and heat in boiling water for 3 minutes. Cool promptly in cold water and drain. Pack in containers leaving a half inch of headspace. Seal and freeze.

#### SUMMER SQUASH

Kentucky Proud Project County Extension Agents for Family and Consumer Sciences University of Kentucky, Dietetics and Human Nutrition students

June 2019

Source: www.fruitsandvegglesmatter.gov

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers market, or roadside stand. http://platelitup.ca.uky.edu



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University of Kentucky College of Agriculture, Food and Environment Cooperative Extension Service

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## Recipes

### April 2025



#### **Oven-Fried Fish Fillets**

- 1 pound fish fillets
- 2 tablespoons lemon juice
- 2 tablespoons vegetable oil
- ¼ cup shredded parmesan cheese
- ¼ teaspoon dill weed
- ¼ teaspoon salt
- 1/4 teaspoon pepper
- 2 cups cornflake-type cereal, crushed

Preheat oven to 350 degrees Fahrenheit. Grease a 13x9 baking dish. Cut fillets into serving pieces, if necessary. In a small bowl, combine lemon juice and vegetable oil. In a separate small bowl, mix Parmesan cheese, dill weed, salt, and pepper. Dip each fillet into lemon juice mixture. Lay in baking dish, sprinkle with cheese mixture, and coat with crushed cereal. Bake uncovered for 20 to 30 minutes or until fish flakes easily.

Yield: 4 servings

Adapted from "Fish and Game Cookbook" by Bonnie Scott, Copyright 2013, Bonnie Scott

Servings per container           Serving size         4 ounces (110g)	
Amount per serving Calories	200
%	Daily Value
Total Fat 6g	8%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 80mg	27%
Sodium 330mg	14%
Total Carbohydrate 12g	4%
Dietary Fiber 0g	0%
Total Sugars 1g	
Includes 0g Added Sug	ars 0%
Protein 24g	
Vitamin D 1mcg	6%
Calcium 97mg	8%
Iron 6mg	35%
Potassium 449mg	10%