

How we grow to CLIMATE POSITIVE

"2022 Review and Next Steps"



Sustainably scalable

A GLOBAL INITIATIVE

Commercial production starting in **United States** Development program in

Southern Europe

South America is the current major

Delivering critical value:

- Cover crop sustainability benefits
- Non-food, no increased land use grown between main crop rotations
- **Traceability and independent certification** for sustainability
- **Increased GHG savings**

Commercial programs starting in Paraguay and Brazil

Commercial programs underway in Argentina & Uruguay









Nuseed and bp enter into strategic agreement to accelerate market adoption of Nuseed Carinata as a sustainable low-carbon biofuel feedstock

01 February 2022

- Nuseed and bp enter into a 10-year strategic agreement enabling Nuseed to accelerate the expansion of its Nuseed Carinata sustainable production program.
- bp will purchase Nuseed Carinata oil and plan to process or sell it into growing markets to supply sustainable biofuels.

U.S. KEY COMMERCIAL MILESTONES in FY22

First signed

Producer

Tentative crush

yields Planting begins Emergence carinata agreement in Contract the Southern TX Replant analysis still in TX and the SE looks promising place contract launched U.S. 80% loss SE recovery to come July December August September November **January February** Producer feedback on Planting dates stretched form >5k aces Grower recovery We start pricing and "Premium" early November in TX to midcontracted engagement begins again! is positive December in the SE

Frost/freeze

event across



Harvest and

Nuseed's Increasing Commitment to Carinata

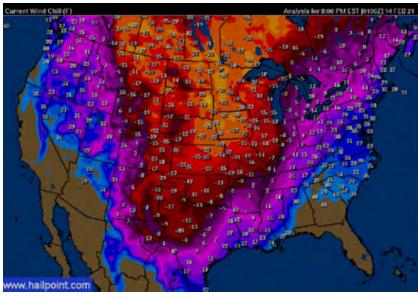




More than 100 people at Nuseed are now working on Carinata today

The Freeze Event



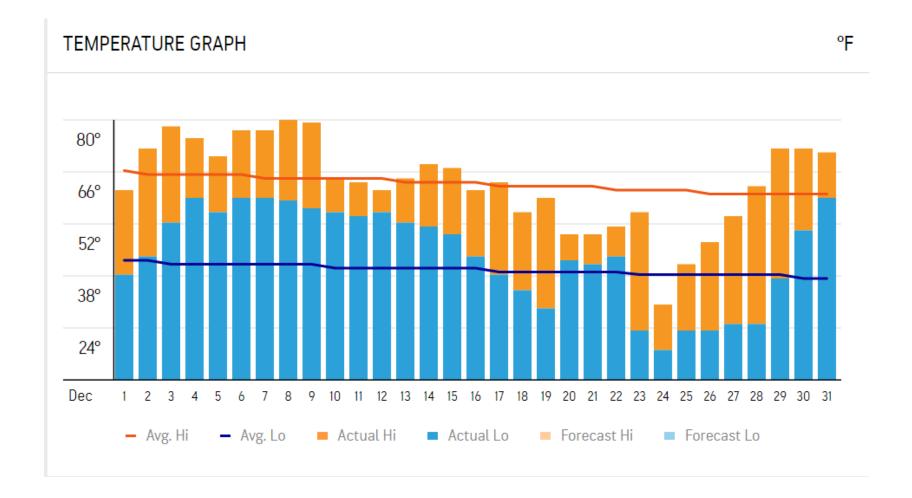


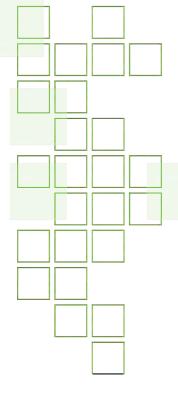




Actuals for Dec 2022 – Tifton, GA

Note – Chart is in Fahrenheit -6 Celsius is 21.2 F



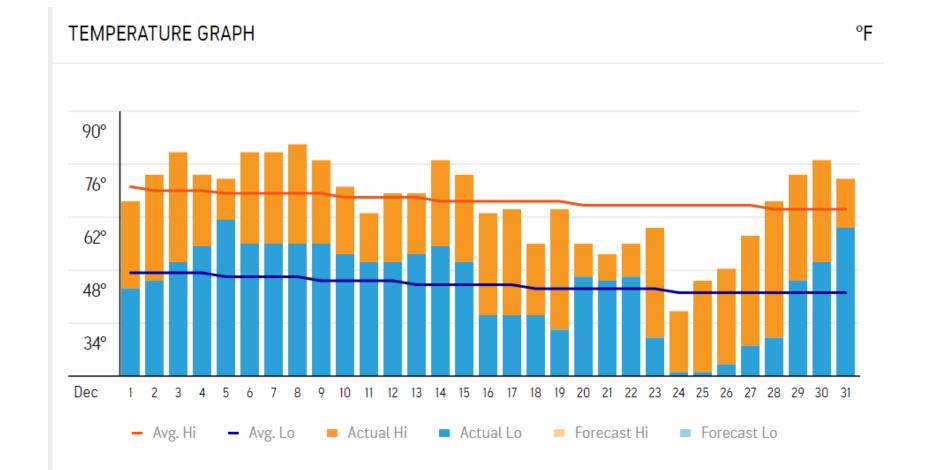


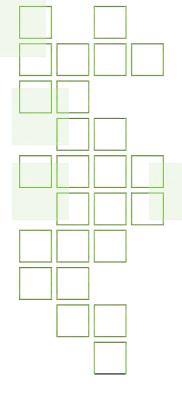
Days below threshold: 1

• 12/24 18 F

Actuals for Dec 2022 – Lake City FL

Note – Chart is in Fahrenheit -6 Celsius is 21.2 F

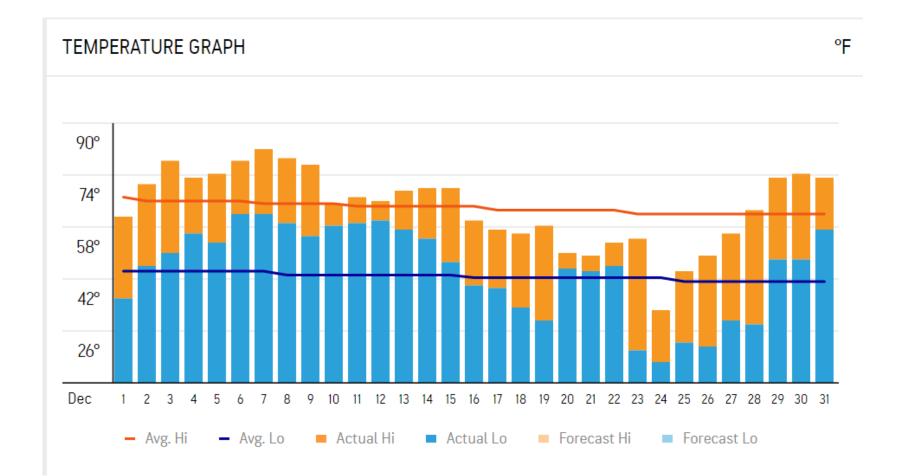


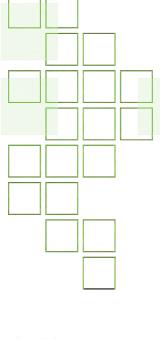


- 12/24 21 F
- 12/25 21 F

Actuals for Dec 2022 – Dothan, AL

Note – Chart is in Fahrenheit -6 Celsius is 21.2 F

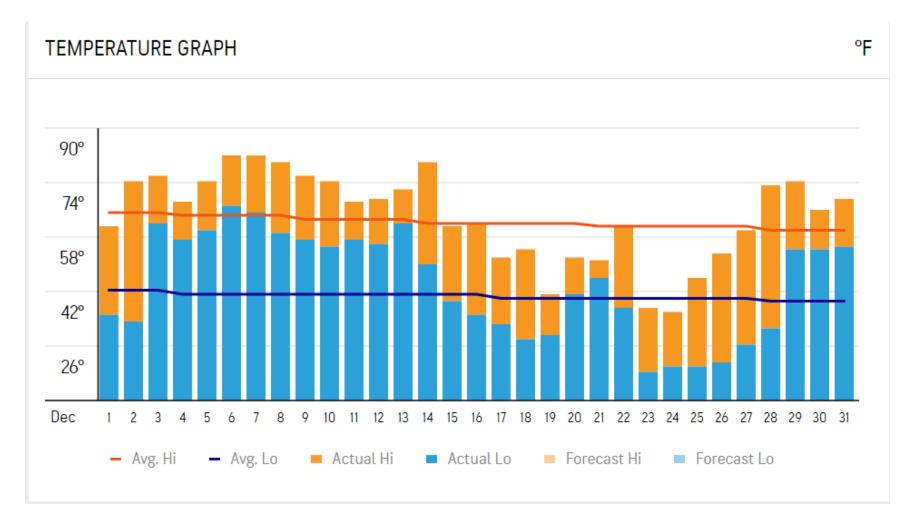


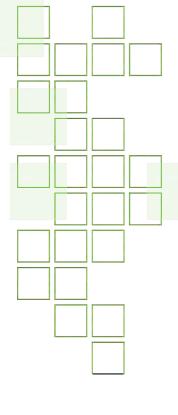


- 12/23 20 F
- 12/24 16 F
- 12/26 21 F

Actuals for Dec 2022 – Hattiesburg, MS

Note – Chart is in Fahrenheit -6 Celsius is 21.2 F

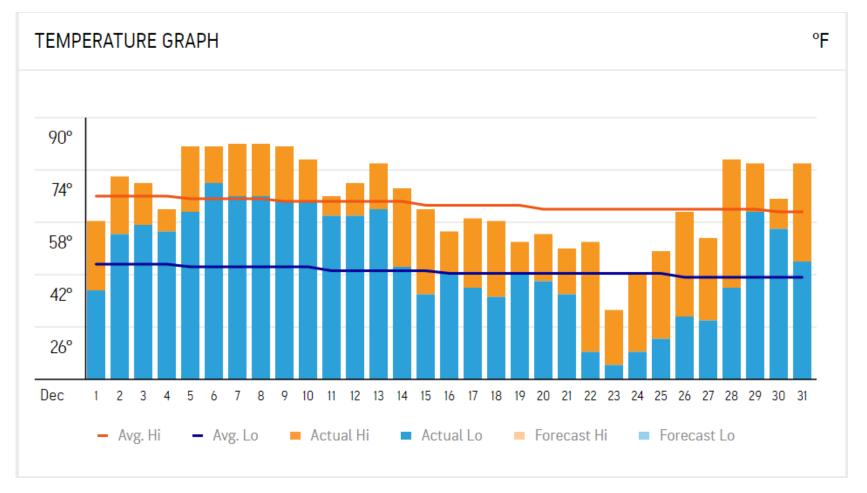


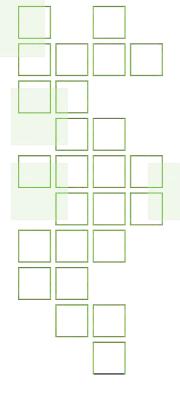


- 12/23 18 F
- 12/24 20 F
- 12/25 20 F
- 12/26 21 F

Actuals for Dec 2022 – College Station, TX

Note – Chart is in Fahrenheit -6 Celsius is 21.2 F





- 12/22 18 F
- 12/23 14 F
- 12/24 18 F



Short term goals for the U.S. Opportunity

The December freeze event, while unfortunate, is a learning experiences

Our goals remain the same:

FY23: 40k acres

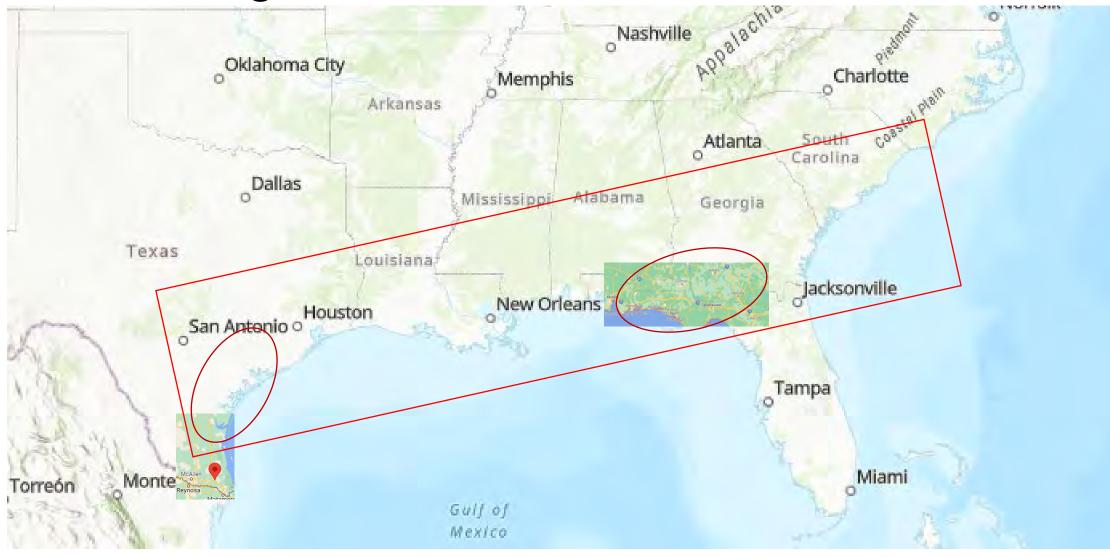
FY24: 80k acres

FY25: 120k acres

Contracting focus: Southeast & Texas

Continue to reward growers for what they grow, and how they grow....adopting sustainable farming practices:

Contracting Focus in Years 1 & 2



What Did We Learn

- Contracting starts early The new 23/24 contract is open
- The value proposition and approach was widely accepted
- Getting producers out of their comfort zone to sign a contract takes time and trust
- Growers who see the value in a cover crop and want this to work, will find the right timing and rotation for their farm
- We needed to relieve the producers concern that the risk falls solely on them
 - Our response to the freeze started at once
- More training is needed, from planting to harvest
- Frost tolerant, early maturity hybrids are essential
 - Nuseed will be testing a new hybrid that is 7-11 days shorter than our current hybrid
- Carinata is incredibly resilient



U.S. Carinata: Moving Forward

- Establish a closed-loop supply chain that's expandable as we grow
- Build trust with producers
 - Ensure Nuseed's commitment to the program and the producer's success is seen and felt
 - Continue to add more Nuseed local resources
 - Utilize existing local resources and assets : Retail, Elevation, Crop Consultants, etc...
 - Engage the Extension network
- Establish the value of carinata as a cover crop and the benefits to the "primary" crop

"Nuseed Carinata delivers all the benefits of a cover crop with greater profitability potential through yield"

- Drive expansion into more agronomically challenging areas as the pipeline allows
- Focus breeding on enabling success in a broader crop rotations and regions
 - Frost tolerance, maturity, HT, etc...

2022-2023 Commercial Carinata Production Highlights of Crop Resilience

by De Broughton, CCA - 6 Gen Ag Services, LLC

Florida locations – Suwannee and Madison Counties Georgia locations – Quitman and Brooks County

Madison County (Lee), FL-Planting dates, 11/22-30

Losses estimated from 20-30%, depending on location







December 30th

Jan 5th



Post-Freeze
*Planted 11/21

- Extra attention needed due to disease and secondary affects from cold.
- Ex.— Focus on crop health via nutrition and disease management



Madison planting, post-cold injury



<u>Current status:</u>
full flower to early pod
filling stages

• Lee, FL



Feb 14th



Brooks county, Georgia

<u>Plantings dates:</u>

early-mid November

Feb 24th

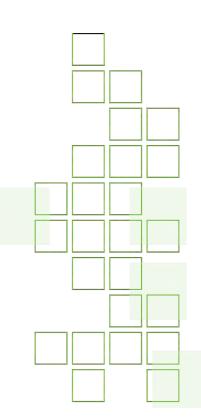


2022-2023 Take-aways

- In southeast areas, Carinata brassica has proven its resilience surviving one of the harshest colds seen here in decades.
 - Branching nature and ability to "fill in" skips from dead plants
 - Plants compensate for lost plants by utilizing extra resources
 - space, moisture, nutrients
 - Nujet 400 is a vigorous, very resilient carinata cultivar
 - compared to previous commercialized and researched cultivars
- With 60+ hours below freezing temps, the crop will need to be cared for and monitored, as would any field crop.
 - Swift action and attention to diseases, moisture, and nutrition ensured the productivity of this year's crop. Good management will be necessary!









An Incredibly Resilient Crop





