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LETTER OF INTEREST

FROM
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TO
Ashley Stewart
Program Coordinator
The University of Arizona
ENR2 – Room N327
1064 E. Lowell Street
Tucson, AZ 85721
PHONE: (520) 621-8567
EMAIL: akstewart@email.arizona.edu

Dear Ms. Ashley Stewart,

Our organization is interested on becoming a member in the Desert Southwest CESU network as a new nonfederal partner organization as we believe we can support and expand the mission of the DSCESU.

We confirmed that we have read the CESU multi-partner agreement and agree to support the CESU mission and goals and fulfill the roles and responsibilities of a nonfederal partner as described in the CESU agreement.

In the last two decades we have been working diligently to “green” the Chihuahuan desert from degraded, lifeless, unproductive land into thriving, lush, beautiful native grasslands using **regenerative** management principles and **rational** grazing as seen in the Pictorial Evidence of this application. Rational meaning a thinking process, not to confused with rotational grazing.

Our approach is based on respecting and working in sync with Nature. Our decision-making process is based on a holistic approach that considers the ecological, economical and social aspects in every context.

Grazing has previously discounted as a management tool for ecosystems. Reality is that grazing under proper management is nowadays used to regenerate degraded rangeland.

We use **animal impact** to regenerate degraded arid landscapes. Our livestock are equipped with the following tools: **Manure, Urine, Hoof Action, Saliva Effect, and Exhalation.**

There are other critical actors in addition to livestock such as the “soil engineers” who play a role in the regeneration of degraded lands such as earthworms, dung beetles, termites, and ants. A few but relevant results we have achieve from our work in the Chihuahuan desert:

- Improve **water infiltration** rates from 2” to 10”+ per hour.
- Get **soil temperatures** stable in summer and winter (not too hot in summer, not too cold in winter) thanks to better ground cover by standing grasses and grass litter.
- **Increase** diversity, quantity, and quality of perennial warm and cool season **grasses** from 5 to 50 grass species.
- Extend the **green season** from 3 to 9 months.
- Increase **biodiversity** such as **wildlife**: peccaries, mule deer, desert box turtles, golden eagles, hawks, mountain lions, bobcats, bats and a multitude of migratory birds that overwinter in the Chihuahuan desert as well as a larger number of **insects:** dragon flies, dung beetles, butterflies, bees, termites, spiders.
- Reduce **dust storms** thanks to better ground cover by standing grasses and grass litter.
- Improve the **bottom line** of ranchers by reducing inputs and increase capacity.

As we created the conditions to promote more biodiversity, we have established a strong relationship with conservation organizations such as the American Bird Conservancy and Bird Conservancy of the Rockies who monitor the change in vegetation and migratory bird populations for the past 10+ years with very positive results. We also advise other conservancy organizations such as The Nature Conservancy on their Private Lands conservation program.

In the last 8 years we have been promoting regenerative ranching principles to restore degraded ecosystems and stop desertification worldwide thru another non-profit organization we are leading: Pasticultores del Desierto. (Desert Grassfarmers).

For more info on this non-profit organization, please refer to the following links:

- Pasticultores del desierto, Asociacion Civil (Pasticultores del desierto, AC) | UNCCD
- iSSUE 02 / aUGUST / 2016 (unccd.int)
- Greening the Chihuahuan desert - YouTube

Our organization's goal is to share our expertise with new partners, agencies, universities, landowners as well as students so they learn how to implement regenerative grazing practices that meet land conservancy, ecosystem, and stewardship goals. We want to leverage our expertise to revolutionize the desert southwest grazing approach, increase resiliency, and grow biodiversity.

ABOUT US

Grasslands Regeneration Project's MISSION is to create an environment that promotes life and the well-being of all living creatures calling native grasslands their habitat, from the smallest organisms such as the soil microbiota to insects, birds, reptiles, mammals, prey, and predators of the prairies; from the rural communities to the landowners and their workers living on the open country.

Our organization primary focus is the use of livestock under rational grazing to stop desertification and land degradation in semi-arid and arid zones around the globe. We use animal impact (herd effect) to mitigate dust storms along highways; restore creeks and springs; create habitat for endangered species such as migratory birds; prevent floods; reduce the intensity and frequency of fires; regulate soil temperatures (warmer in winter, cooler is summer); sequester more carbon (carbon credits); and improve the profitability of ranchers.

You can find more information about us on the following website:

- Grasslands Regeneration Project Website

PRIMARY PROGRAM

Our primary program is to support federal, state, and NGO organizations making focused decisions in either implementing or improving grazing management practices to promote their ecosystem and regeneration goals.

Following is some of the organizations we have partner with to revive desert grasslands:

- **United Nations** - https://www.unccd.int/cso/pasticultores-del-desierto-asociacion-civil-pasticultores-del-desierto-ac-0
- **World Resource Institute** - https://www.wri.org/insights/ecosystem-restoration-questions, https://wrimexico.org/node/3299
- **National Center for Appropriate Technology -** https://soilforwater.org/regenerating-rancho-las-damas-in-mexico/
- **Initiative 20x20** - https://initiative20x20.org/partners/fundacion-pasticultores-del-desierto-ac
- **Regeneration International** - https://regenerationinternational.org/nuestra-red/
- **Land Stewardship Project** - https://landstewardshipproject.org/grazing/
- **American Bird Conservancy** - https://abcbirds.org/in-mexico-grassland-birds-thrive-under-a-new-approach-to-cattle-ranching/

Our current nexus lies under the Navy Climate Change Initiative in the Desert Southwest, specifically at the Marines Corps Station in Yuma, Arizona, where we will be using regenerative grazing (a natured based solution) to support the goals of the Navy. Regenerative grazing follows the regenerative principles of animal integration, living roots, diversity of plants and animals, armor in the soil, and minimal soil disturbance.

For more information on the Navy Climate Change Initiative, please look at the following links:

- Engineering With Nature (dren.mil)
- What Liz Cheney got wrong — about climate change | The Hill
- Navy Hosts Meeting on Climate Resilience in Hawaii - MilitarySpot.com

STAFF

Program Manager: Alejandro Carrillo
Alejandro is a regenerative cattle rancher in the Chihuahuan desert. He is also an educator, speaker, technical advisor, and board member working with multiple institutions, organizations, and family ranches in the US and beyond.

- Bio
  - Alejandro Carrillo — Cuenca Los Ojos
- Educator
  - Alejandro Carrillo - Soil Health Academy

- Technical Advisor
  - Regenerating Rancho Las Damas in Mexico – Soil for Water
  - Who We Are - Understanding Ag
- Board of Directors
  - Board of Directors – Connecting People, Birds and Land for a Healthy World (birdconservancy.org)
  - About HMI (holisticmanagement.org)
  - People — Cuenca Los Ojos
  - Rio Grande Joint Venture (rgjv.org)
- Interviews
  - Skilled Labor Series: Ranching with Alejandro Carrillo — MCJ Collective
  - Las Damas Ranch - Land Stewardship Project

Grazing Lead: Marcos Jeffers
Marcos is a regenerative cattle rancher, educator, and consultant with over 6 years of experience. Marcos assists individual family ranchers on regenerative practices and has led regenerative grazing projects in Texas related to green initiatives and carbon sequestration in the oil industry.

Grazing Lead: Fernando Falomir
Fernando is a regenerative cattle rancher, educator, and consultant with 10+ years of experience. Fernando assists individual family ranchers and organizations across the US and South America in regenerative ranching practices.

Grazing Specialists are project-based employees.

FACILITIES/RESEARCH

Our facilities are our own cattle ranches located in the Chihuahuan desert covering thousands of acres under regenerative ranching practices. They act as labs to conduct research, development, and education on regenerative ranching practices in semi-arid environments. Each member of our team has practical experience and have demonstrated the ability to stop land degradation and desertification on their own properties. Here a few activities done within our ranches/native land holdings:

- **Wildlife Conservation**. For the last 10 years we have worked with the Bird Conservancy of the Rockies & the American Bird Conservancy to monitor and collect data on vegetation and migratory bird populations. These projects are partially funded by US Forest grants.

- **Dust Storms Mitigation**. We collaborate with the EPA on mitigating dust storms along the Rio Grande by using livestock as the main tool to cover bare soils with native grasses.
- **Educational services**. We work together with the United Nations Convention to Combat Desertification and Land Degradation (UNCCD), the World Resource Institute (WRI) and Nature Conservancy Organizations to offer seminars for ranchers, conservationists and delegates on regenerative ranching and farming principles.
- **Carbon Sequestration**. We work with several carbon credit companies across the US to offer regenerative desert grasslands as a nature-based solution.
- **Ranch visits**. We encourage ranchers, conservationists, and government organizations to visit our ranches as an opportunity to learn and see firsthand the regeneration of grasslands in the Chihuahuan desert.

CONFIRMATION OF INDIRECT COSTS RATE

Grasslands Regeneration Project, LLC agrees to accept a limited overhead rate of 17.5%. This rate is applicable for activities conducted through the CESU, including research, technical assistance, and educational activities.

AGREEMENT TO RELY ON AGENCY SPECIFIC NEEDS

Grasslands Regeneration Project, LLC agrees to relay agency-specific research, technical assistance, and educational needs and associated funding opportunities to other institutional/organizational members.

POINT OF CONTACT

Alejandro Carrillo will be our technical representative to serve on the CESU Executive Committee, participate in CESU annual/semi-annual partner meetings, and facilitate internal and external communication, promotion, and response to CESU correspondence and administrative actions.

Alejandro Carrillo has also been designated as administrative or grants and agreements representative to serve as financial assistance point of contact.

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CASE STUDIES

- Las Damas Ranch Case Study - Understanding Ag
- Restoring Native Grasslands in Northern Mexico — Nature Based Solutions | PBL Netherlands Environmental Assessment Agency

STORIES

- Water in Plain Sight: Hope for a Thirsty World – NM Healthy Soil Working Group
- Dispatch From the Chihuahuan Desert Grasslands ⋆ Savory Institute
- Beyond Stockmanship At Rancho Las Damas, by Bob Kinford | Pitchstone Waters
- Manejo Holistico in Chihuahua - Las Damas Ranch | Pitchstone Waters
- Mexican rancher finds success with regenerative grazing - Brownfield Ag News

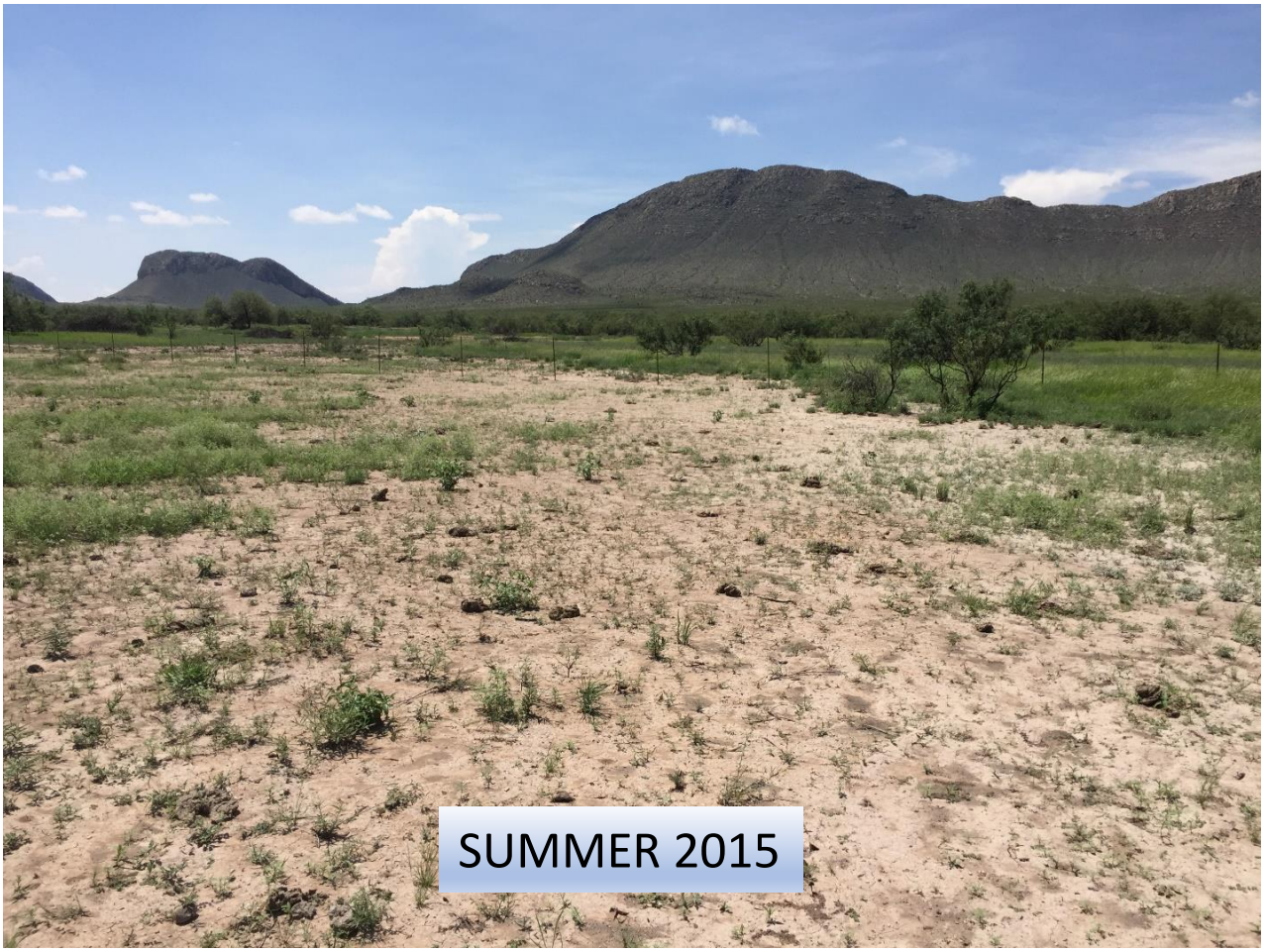
PICTORIAL EVIDENCE

Following is a series of pictures comparing conventional ranching vs regenerative ranching in the Chihuahuan desert on work that has been done by our associates on their own ranches.

Fig1. Pictures taken on the same day under the same precipitation in neighboring properties during Winter in the Chihuahuan desert. **LEFT**: Tobosa grass under conventional grazing, lots of stem, mostly oxidized. **RIGHT**: Tobosa grass under rational grazing, yellowish color with plenty of leaves.

Fig2. Pictures taken on the same day under the same precipitation in the same region in **Summer** in the Chihuahuan desert. **LEFT**: Tobosa grass under conventional grazing, lots of stem, mostly oxidized. **RIGHT**: Tobosa grass under rational grazing, darker green color with plenty of leaves.

The following three pictures show the natural succession from bare ground to weeds, then from weeds to grasses in the Chihuahuan desert using rational grazing in a period of 6 years. No mechanical work, no seeding, no spraying, just animal impact and the correct rest periods.




SUMMER 2018


SUMMER 2021

Fig3. Picture taken this summer with Alejandro Carrillo at his ranch among Green Sprangle top perennial grasses. This tall grass was not seeded, but the conditions were created to promote its germination (a combination of animal impact and long rest period). This native grass is native to the whole Desert Southwest.

Fig4. The LEFT side is land that is under rational grazing. The RIGHT side is under conventional grazing. The small water cycle is influenced by the soil temperatures, green cover, and evapotranspiration of green plants. We have seen in the last few years an increase of rainfall on land that has been regenerated.

The following pictures show the use of bale grazing in the Chihuahuan desert using hay bales and livestock under planned grazing management to cover bare ground within a year. Armor in the soil is one of the regenerative agriculture principles. We created the conditions for dormant seeds to germinate.

Mine reclamation work done in a gold open pit mine in the state of Chihuahua, Mexico using high-density grazing & biological carpeting. Results were seen within the same year.

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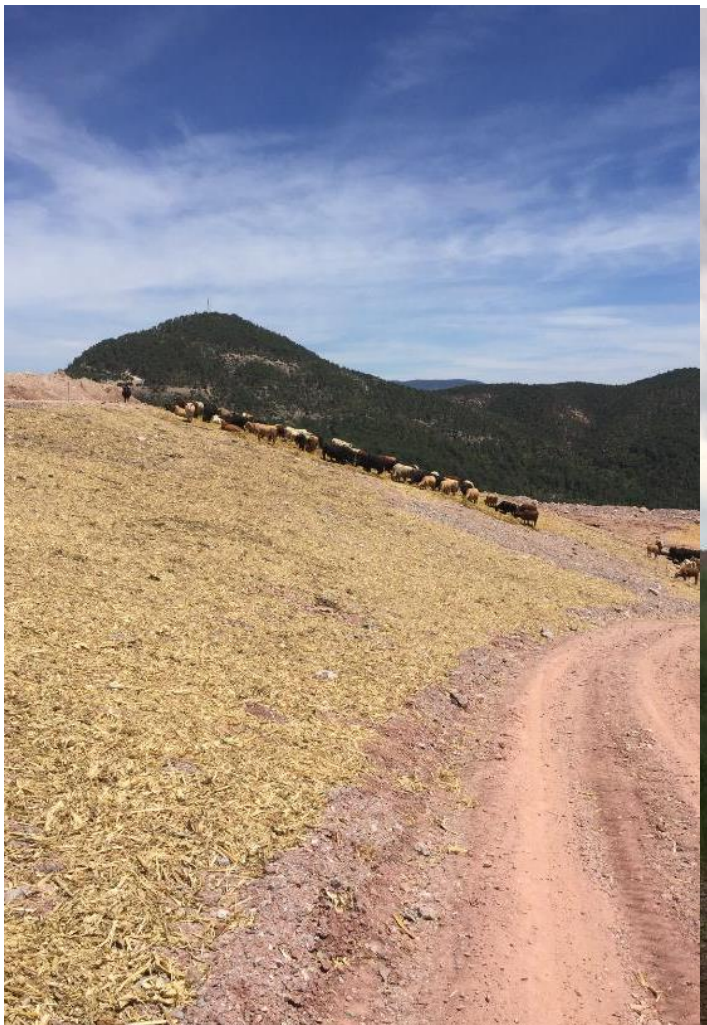

SIGNATURE

Alejandro R. Carrillo
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Grasslands Regeneration Project, LLC