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### November 2011

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### Announcement: New IGA Staff Member

It is with great pleasure that we announce the appointment of Remedios Carrasco, who began working with IGA on October 1, 2011. Her passion for rural people and especially farmers, combined with her social and networking skills, make her a wonderful addition to our team.

Remedios will help IGA to achieve a central challenge, the development of services to bring research at a local and development level. The task is to utilize the expertise found in IGA's network: development agencies, farmer organizations and local governments, to achieve the main goal of the association "to promote goat research and development for the benefit of societies". In her efforts, she will work closely with our Jean-Paul Dubeuf (IGA President) and Christian DeVries (Executive Director), but she will be relying on many other people. We know that if you're asked to participate, you will provide her with full cooperation. Remedios brings on board a wealth of experience in

*Continued on page 11*

### Announcement: 11th ICG Canary Islands (Spain) from September 24 to 27, 2012

The "International Goat Association" is an international Association and network operating in over 50 countries to promote goat and small ruminant research and development to help humankind to face challenges as poverty, climate change and environment.

The Canary Island Conference is the best framework for meeting stakeholders and updating knowledge relating to small ruminants production, transformation and marketing, environmental management, climate change, development cooperation, social participation, rural governance and any field involving small ruminants.

#### Why should you go to the Canary Islands and participate in the XI ICG?

The XIth International Conference on goats:

- is the premiere world event for learning the last research results and discovering new small ruminant and development initiatives,
- is the best framework for setting new collaborations. The IGA's main priority is to strength partnerships with development agencies, NGOs and farmers organizations to pool energies for facing new challenges,
- gives you the opportunity to publish your last results. A special issue of "Small Ruminant Research," the official journal of the IGA, will be devoted to papers presented at the Conference,
- will give you the opportunity of enjoying the charms of a beautiful and varied island, probably the territory with the most small scale goat cheese

making units in the world (nearly 500).

#### To whom is addressed the XI ICG?

- To researchers and technicians,
- To farmers and farmer's representatives,
- To local and international development agents,
- To representatives of international and national institutions.

You will find more information in the program and on the Conference website ([www.icg2012.org](http://www.icg2012.org)), as well as on the IGA website ([www.iga-goatworld.com](http://www.iga-goatworld.com)).

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## La IGA celebra su XI Conferencia Internacional en las Palmas de Gran Canaria (España) del 24 al 27 de septiembre de 2012

La "International Goat Association" es una asociación internacional presente en más de 50 países y dedicada a promover la investigación y el desarrollo de los mundos caprinos y de los pequeños rumiantes para contribuir a afrontar retos actuales como la pobreza, el cambio climático y el medio ambiente.

La Conferencia de Las Palmas de Gran Canaria es el marco de reunión de actores (investigadores, técnicos, ganaderos, "policy-makers") y disciplinas (producción de pequeños rumiantes, transformación y comercialización de productos, ambiente, cambio climático, cooperación al desarrollo, gobernanza rural..) para confrontar puntos de vista, innovaciones y perspectivas.

### ¿Por qué participar en la XI Conferencia de las Palmas de Gran Canaria?

- Por ser el lugar de encuentro de los últimos resultados científicos e iniciativas de los mundos caprinos y pequeños rumiantes y del desarrollo.
- Por ser el marco propicio para establecer nuevas colaboraciones profesionales en el campo de la investigación y el desarrollo. La IGA desea reforzar colaboraciones con agencias de desarrollo, organizaciones no gubernamentales y organizaciones agrarias para aunar energías e ir afrontando nuevos retos.
- Para disfrutar de una isla de contrastes y una isla ganadera de uno de los archipiélagos más queseros del mundo que cuenta

con casi 500 queserías pastoras, en su mayoría de cabra.

- Para dar a conocer y publicar sus últimos resultados. Un número especial de "Small Ruminant Research", la revista científica de la IGA, irá dedicado a la publicación de los trabajos presentados en la Conferencia.

### ¿A quién va dirigido?

- A investigadores y técnicos.
- A ganaderos,
- A agentes locales e internacionales de desarrollo.
- A representantes de instituciones nacionales e internacionales.

Encontrará más información en el programa como en la página web de la Conferencia ([www.icg2012.org](http://www.icg2012.org)) y nuestro sitio Web ([www.iga-goatworld.com](http://www.iga-goatworld.com)).

## La XIème Conférence de IGA aura lieu aux Canaries (Espagne) 24-27 septembre 2012

L' "International Goat Association" est une association en réseau présent dans plus de 50 pays. Son objectif est de promouvoir la recherche et le développement des activités caprines et des petits ruminants pour contribuer à faire face aux grands défis qui sont la pauvreté, le changement climatique, et l'environnement.

La prochaine « Conférence Internationale Caprine » qui aura lieu aux Canaries permettra de réunir acteurs (scientifiques, agents économiques, techniciens, décideurs) et disciplines (production animale, transformation et commercialisation des produits, économie, environnement), pour confronter les différents points de vue, nouveautés et perspectives

### Pourquoi participer dans la XIème Conférence des Îles Canaries?

- C'est le lieu de confrontation des derniers résultats scientifiques et des innovations en initiatives de développement.
- C'est le cadre idéal pour entamer des nouvelles collaborations professionnelles dans le champ de la recherche et du développement. Une des priorités de l'IGA est de renforcer les collaborations avec les agences de développement, les ONG et les Organisations agricoles pour joindre forces et énergies pour faire face à ces nouveaux défis.
- Gran Canaria est une île de contraste, de beaux paysages parsemés de petites exploitations pastorales. L'archipel des Canaries est

probablement un des endroits au monde avec la plus forte densité de fromageries caprines (+ plus de 500) artisanales.

- Pour faire connaître et publier vos résultats. Un numéro spécial de « Small Ruminant Research », le journal officiel de l'IGA, sera consacré aux travaux présentés lors de la Conférence

### A qui s'adresse la Conférence?

- Aux chercheurs et techniciens
- Aux éleveurs,
- Aux agents locaux et internationaux de développement,
- Aux représentants d'institutions nationales et internationales.

Vous trouverez plus d'information sur le programme que sur le site web de la Conférence ([www.icg2012.org](http://www.icg2012.org)) et le site de l'IGA ([www.iga-goatworld.com](http://www.iga-goatworld.com)).

## Application of Goat on Wildfire Prevention in Natural Resources Lands

Written by F. Mirzaei<sup>1</sup>, F. Afraz<sup>2</sup>, H. Gholami<sup>3</sup> and S. F. Mehdizadeh<sup>4</sup>

The goat (*Capra hircus*) is an extremely agile, gregarious, and opportunistic creature. Management, through innovation and creativity, can successfully use those characteristics for the enhancement of lands. When using goats for ladder fuel reduction, fire breaking, weed abatement, and riparian area restoration, there are basic behavioral patterns that can be used to enhance utilization of the goats or to curtail problems before they arise. The selection of environmentally adapted goats, goats that are in good physical condition, and structurally correct conformation are conducive to success. There are various tools that can be used to minimize the damage done by fire to grasslands, rangelands, forests, homes, and personal property. All approaches must take into consideration the climate, topography (slope, soil,

elevation), vegetation type (drought tolerant plants, plants adapted to fire, and plants that can be managed to minimize fire travel), and fire frequency in the area. Goats are only one in many management scenarios that can be used to curtail the devastating loss created by fire. The reduction of down material can be accomplished by firewood cutting of downed trees, the physical removal of downed trees, or the use of livestock to break down. Goats used for fuel load reduction are managed to remove dense understory and lower branches to prevent laddering. This technique takes time, and time relates to the biological control of reduction and returning to sites being reduced. On occasion, depending on availability of vegetations, it can mean the supplementation of protein, energy, or balanced minerals for the goats (depending upon the class of goat used and time of year). Goats naturally have

a preference for brush, forbs, and weeds. Goats can be used successfully to minimize weeds in pastures and can be managed successfully when co-grazed with other species of livestock (cattle, sheep, and horses). In this review study, the goat's role is emphasized not only to secure required protein of nations throughout goat population enhancement in the globe, but also making a revision on its impression as an animal for the future for natural resources lands and vegetation eradication.

**Keywords:** goat, wildfire management and natural resources. For more information you can contact the authors at: [farmir2001@yahoo.com](mailto:farmir2001@yahoo.com)

- 1- Scientist on Livestock production management, Animal Science Research Institute of Iran (ASRI)
- 2- Assistant Professor on Animal breeding, ASRI
- 3- Assistant Professor on Animal nutrition, ASRI

## استفاده از بز در مدیریت جلوگیری از بروز آتش سوزی در عرصه های منابع طبیعی

فرهاد میرزایی<sup>1</sup>، فضل الله افراز<sup>2</sup>، حسین غلامی<sup>3</sup> و سید مظفر مهدیزاده<sup>3</sup>  
1 محقق مدیریت دامپروری موسسه تحقیقات علوم دامی کشور (f\_mirzaei@asri.ir, farmir2001@yahoo.com)

استادیار پژوهشی اصلاح دام موسسه 2 تحقیقات علوم دامی کشور  
3 استادیار پژوهشی تغذیه دام موسسه تحقیقات علوم دامی کشور

یک موجود بی نهایت (*Capra hircus*) بز) چابک، اجتماعی و فرصت طلب است لذا مدیریت از طریق نوآوری و ابتکار می تواند بطور موفقیت آمیزی روی این خصوصیات برای افزایش کاربری زمین مورد استفاده قرارگیرد. با شناخت الگوهای رفتارشناسی میتوان از بزها در جهت کاهش مصرف سوخت فسیلی، خاموش کردن آتش سوزی در بوته زارها، مزارع و درختستانها، کاهش

آفتهای گیاهی و بهبود پوشش گیاهی مناطق ساحلی بهره جست. اگر انتخاب از بزهایی که به محیط عادت کرده باشند صورت گیرد، موفقیت برنامه ها از نظر ساختاری افزایش می یابد. ابزارها و راههای مختلفی برای جلوگیری و یا به حداقل رساندن صدمات ناشی از آتش سوزی در جنگلها، مراتع، علفزارها وجود دارد. کلیه این رویکردها با ملاحظات آب و هوایی، نقشه های زمین شناسی (شیب زمین و نوع خاک و ارتفاع از سطح دریا)، نوع رستنیها (گیاهان مقاوم به خشکی، گیاهان مقاوم به آتش سوزی و گونه های گیاهی که از زبانه کشی آتش جلوگیری می کنند) و فراوانی آتش سوزی در منطقه همراه است. بزها تنها یکی از این سناریوهای مدیریتی هستند. کاهش موادی که اشتعال زا هستند نظیر درختهای خشک و یا مستعد آتش سوزی و همچنین استفاده از بز که با کمک به شناسایی درختان نیمه خشک و یا بیماری می تواند از بروز و پیش روی آتش جلوگیری نماید. البته استفاده از بز در مدیریت آتش سوزی امری زمان بر است که

آن هم به کنترل بیولوژیکی مناطقی که استعداد آتش سوزی دارند نیز مربوط میشود. همچنین دسترسی به رستنیها میتواند مکملی برای تامین نیازهای انرژی و پروتئین و باقی مواد معدنی آنها باشد (با توجه به نوع بز اعم از شیری یا گوشتی و در حال رشد و اثر فصل سال). بزها به صورت طبیعی خوردن بوته ها، علف های هرز و علوفه کنار جوی را ترجیح میدهند. بزها قابلیت حداقل کردن علف های هرز در مراتع را داشته و حتی در کنار گاوها و گوسفندان و سایر دامها، کارایی این دام افزایش هم می یابد. در این مقاله مروری سعی گردیده است تا با استفاده از منابع جدید و معتبر با توجه به باز تولید نقش بز در تامین پروتئین مورد نیاز جامعه جهانی و میل به افزایش جمعیت این گونه دامی، در القای نقش این دام غالب برای آینده بشری در تخریب رستنیهای طبیعی باز نگری گردد.

لغات کلیدی: بز، مدیریت آتش سوزی و منابع طبیعی

## IGA Members

Organizations like the International Goat Association rely on the commitment of their members. You are the driving force behind what we do, and we want to say thank you.

In each IGA Newsletter we will recognize some of our awesome members. If you're a member and you would like to appear in an upcoming Newsletter, then please send us a short bio and a photo.

### Dr. Jim De Vries

Jim has been an IGA member for 14 years and for the last 7 years has served on the IGA Board of Directors as the Secretary-Treasurer.

Recently he retired as Senior Vice President of Programs for Heifer International after more than 28 years of service. While at Heifer he provided leadership for staff around the world, developing and managing more than 770 projects through 53 country and regional offices

Prior to Heifer, Dr. De Vries was a professor and head of the

Agricultural Extension and Education Department at Sokoine University in Morogoro, Tanzania. Dr. De Vries was born in The Netherlands and is fluent in English, Dutch and Swahili, as well as reading and understanding German. He has a Ph.D. in continuing and vocational education from the University of Wisconsin, an M.S. in cooperative extension (education) and a B.A. in history and religion from



Dr. Jim De Vries

Bloomfield College in New Jersey.

### Windshadow Farm & Dairy

Dr. Ronald Klein has been an IGA member for 1 year. Ron was a Senior Research Scientist at Pharmacia Animal Health where he studied the molecular biology of GI parasites of small ruminants. He is also an attorney interested dairy/agricultural regulatory issues,

After retiring in 2002, Ronald and Suzanne, an attorney specializing in Federal and small business law, opened Windshadow Farm and Dairy in Bangor, Michigan in 2010. Now they are a certified Grade A dairy. They milk 40 dairy goats and have a herd of 24 dairy water buffalo. They have a cooperative agreement with Evergreen Lane Creamery in Fennville, Michigan (another dairy goat farm) where the goat and water buffalo milk are made into fresh and hard cheeses, and a wonderful water buffalo milk camembert. They plan to have their artisan cheese plant approved in 2012.

Send your bio to: [goats@heifer.org](mailto:goats@heifer.org)

## How Goats Arrived in the Mediterranean: What the Paleogenetic Tells Us?

*Research by Sandrine Hughes, CNRS and University of Lyon*

Goats were among the first domesticated animals 10,500 years ago contributing to the establishment of the Neolithic Revolution.

Previous genetic studies have indicated that contemporary domestic goats (*Capra hircus*) show far weaker intercontinental population structuring than other domestic animals suggesting that goats have been transported extensively. However, the periods

covered by such movements remain unknown. To address this issue, a set of mitochondrial DNA of ancient goat bones (years 7300-6900) of one of the earliest Neolithic sites in southwestern Europe have been studied.

Phylogenetic analysis revealed that two highly divergent goat lineages coexisted in each of the two early Neolithic layers of this site. This indicates that a high diversity of mitochondrial DNA was already present over 7,000 years ago in goats in European areas far from

their initial domestication in the Middle East.

These results argue for substantial mixing of genes among goat populations dating back to the early Neolithic Europe and for a dual domestication scenario in the Middle East with two independent but essentially contemporary origins (both lines A and domestic C), and several origins earlier and/or after. More recent work can place southern France, Corsica, mainland Italy and the two islands of Sardinia and Sicily.



## Recent Interesting Articles

### [Cytokine antibody array analysis in brain and periphery of scrapie-infected Tg338 mice](#)

*Comparative Immunology, Microbiology and Infectious Diseases, In Press, Corrected Proof, Available online 23 July 2011*

Denise M. Newsom, H. Denny Liggitt, Katherine O'Rourke, Dongyue Zhuang, David A. Schneider, Robert D. Harrington

### [Nutritional evaluation of fruit and vegetable waste as feedstuff for diets of lactating Holstein cows](#)

*Journal of Environmental Management, In Press, Corrected Proof, Available online 23 July 2011*

Joaquin Angulo, Liliana Mahecha, Sergio A. Yepes, Angela M. Yepes, Gilberto Bustamante, Harold Jaramillo, Edward Valencia, Tomás Villamil, Jorge Gallo

#### Highlights

- Fruit and vegetable waste (FV) was evaluated for diets of lactating cows.
- FV increased  $\alpha$ -linolenic and *cis*-9,*trans*-11 CLA in milk.
- FV did not affect intake nor milk yield per kg of eaten concentrate.
- It is possible to include FV in the concentrate between 6 and 18% of dry matter.
- These results show an important alternative for sustainable animal food production.

### [Rinderpest: The end of cattle plague](#)

*Preventive Veterinary Medicine, In Press, Corrected Proof, Available online 23 July 2011*

Peter L. Roeder

### [No loss of production due to larval challenge in sheep given continuous anthelmintic treatment via a controlled release capsule](#)

*Veterinary Parasitology, In Press, Accepted Manuscript, Available online 23 July 2011*

G.A. Kelly, S.W. Walkden-Brown, L.P. Kahn

### [The relevance of group size on goats' social dynamics in a production environment](#)

*Applied Animal Behaviour Science, Volume 134, Issues 3-4, 15 November 2011, Pages 136-143*

Inger Lise Andersen, Hege Tønnesen, Inma Estevez, Greg M. Cronin, Knut Egil Bøe

### [Second-order cybernetics as a tool to understand why pastoralists do what they do](#)

*Agricultural Systems, Volume 104, Issue 9, November 2011, Pages 655-665*

Brigitte A. Kaufmann

#### Highlights

- It is unclear how pastoralists regulate production processes in low input systems.
- Second order cybernetics gives insight in the actors' system perspective.
- It translates their experience and expertise into information for outsiders.

- It reveals where and why pastoralists lack control possibilities.
- This permits to identify sensible improvements from pastoralists' perspective.

### [The lipid component of Massese ewes' colostrum: Morphometric characteristics of milk fat globules and fatty acid profile](#)

*International Dairy Journal, Available online 24 September 2011*

Mina Martini, Iolanda Altomonte, Federica Salari

#### Highlights

- In this study we investigated nutritional characteristics of Massese ewe's colostrum.
- Colostrum from the first 10 hours showed a large diameter of fat globules (4.07 $\mu$ m).
- High monounsaturated and essential fatty acids were found at 10 hours post partum.
- Saturated FAs were found in lesser amounts than milk.
- Characteristics of colostrum seem an adaptation to the requirements of the lambs.

### [The effect of maternal linseed supplementation and/or lamb linseed supplementation on muscle and subcutaneous adipose tissue fatty acid composition of indoor lambs](#)

*Meat Science, Available online 24 September 2011*

V. Berthelot, P. Bas, E. Pottier, J. Normand

## Social Networking Report

We have received a lot of great feedback regarding our posts on Facebook and Twitter. Many of you have told us how much you enjoy what we are posting. By the beginning of October we had 252 people who liked IGA and more

than 180 active users. We recorded almost 7,000 post views in September alone. However, while many of you read what we're posting only a few of you have left comments. We hope that in the future you will find ways to add

you're voice to our organization. You can join our current discussion of Goats and Grasslands on Facebook, or submit new topics that you are interested in to [admin@iga-goatworld.com](mailto:admin@iga-goatworld.com). We look forward to your comments.

## Announcement: New IGA Staff Member (continued from page 1)

coordination and management of cooperation projects concerning rural development and farming. In France, she coordinated a Mediterranean project for the recognition of multi-functionality of pastoralist systems (Pastomed). She also implemented a project for the valorization of Alps cheeses made by transhumant (Proalp). In Spain, she designed and implemented a regional project for

the modernization of pastoralists systems (Cayado y Zurrón). She created a regional association involving farmhouse cheesemakers and consumers (Artequex). Remedios is also the Spanish contact of the Network of European Farmhouse Cheesemakers.

Remedios studied Veterinary Surgery at the Cordoba University

of Spain and at the Liège University of Belgium. She undertook a Superior Post-University Degree on Rural Development Management at the CIHEAM in Montpellier, France. Kindly join us in giving Remedios Carrasco a very warm welcome.

Her contact information is:  
remedios.iga.goats@gmail.com  
+34 676 729011  
skype:pastomed

## IGA Sponsorship Fund

We are looking forward to the Xlth International Conference on Goats scheduled to take place on Gran Canaria, Canary Islands, Spain. The theme for this fantastic international conference will be, Goat farming and industry in rural activities: science, innovation and development. You can help us make this a great success! One of IGA's goals is to make it possible for more young professionals, especially women professionals, who are interested in goat production and research to be involved in this conference. In most of the world, goats are cared for by women and are an extremely important source of food and income for the poor. However research and development on goats is still lagging perhaps exactly because they tend to be the domain of the poor and

marginalized.

We need your help in sponsoring some young professionals who cannot afford to participate in this conference on their own. Connecting young professionals with some of the top scientists in the field and exposing them to the needs of peasant farmers and goat producers of all types will stimulate much needed work to continue to increase the productivity of goats, the safety of various food products, and in general the wellbeing of farmers and herders.

**Please consider donating to our sponsorship fund.** Our goal is to provide this opportunity to at least 10 people.

The average cost for sponsoring a young professional's participation

will be around \$1,500 USD to cover airfare, food and accommodation. If you are unable to contribute a full sponsorship, please contribute whatever you can \$500, \$250, or \$100. Perhaps you can persuade your institution to sponsor someone. All sponsorships will be recognized at the conference in Queretaro and in IGA publications unless you prefer to remain anonymous. Thank you for helping us make this an event that will be accessible to all.

Send your contributions to:  
International Goat Association  
Attn: Christian DeVries  
1 World Avenue  
Little Rock, AR 72202 USA  
[goats@heifer.org](mailto:goats@heifer.org)

Sincerely,  
**Jean-Paul Dubeuf**

**2011 OFFICIAL MEMBERSHIP APPLICATION**  
MEMBERSHIP YEAR

PERSONAL INFORMATION (Please type to ensure accuracy)

FAMILY OR SURNAME: \_\_\_\_\_ GIVEN NAME OR FIRST NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_ ORGANIZATION: \_\_\_\_\_

ADDRESS LINE 1: \_\_\_\_\_

ADDRESS LINE 2: \_\_\_\_\_

CITY/STATE: \_\_\_\_\_ COUNTRY/ZIP CODE: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_ FAX NUMBER: \_\_\_\_\_

EMAIL: \_\_\_\_\_

**IGA MEMBERSHIP**

1st \$1,500 per year - one year IGA membership\* (includes the journal)

2nd \$750 per year - one year membership\* with the official journal of the IGA, *Small Ruminant Research*

3rd \$400 per year - one year membership\* without the journal

4th \$150 per year - one year IGA membership\* including Small Ruminant Research

All IGA members get an extra article in *Small Ruminant Research* and are from January to December.

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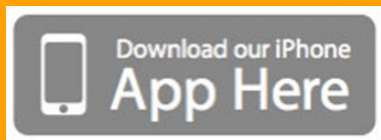
Payment info if check payment: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Remember to renew your IGA membership for 2012**



**Follow us on Twitter for regular news updates**



## International Goat Association

**Attn: Christian DeVries**  
**1 World Ave.**  
**Little Rock, Arkansas 72202, USA**  
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