



NEWSLETTER

November 1996

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International Goat Association Objectives:

- Fostering the use of goats to provide for the needs of humankind.
- Encouraging research with and development of goats to increase their productivity and usefulness throughout the world.
- Perpetuating the International Goat Conferences.
- Sponsoring the Journal of Small Ruminant Research.

Goats and the Environment

Ruth Gatenby

Goats are often blamed for damaging the environment. Is this a valid claim? Many readers of this newsletter will think not, but many development officers and in particular foresters with whom I have worked, feel that goats must be banned if development is to take place.

This concern about goats and the environment is not new. One has only to look at scientific journals and more popular publications to realize that the interactions of goats with the environment has been seriously considered during the last 20 years.

Almost 2000 years ago when the New Testament of the Bible was written goats already had a bad name, the implication being that sheep are good and goats are bad: *When the Son of Man comes in his glory. . . he will separate the people from one another as a shepherd separates the sheep from the goats. He will put the sheep on his right and the goats on his left. Matthew 25:31:33*

When I was a student in Britain in the 1970's it was generally assumed that the main objective of agricultural science was to increase the productivity of crops and animals. The economists pointed out that increasing biological production was not always the sole aim; economic performance should also be considered. But nowhere do I remember the concept of sustainability being introduced.

Today there is considerable awareness among scientist, development workers and the general public that we need to protect our environment and preserve it for future generations. Sustainability has become a buzz word.

Understanding of the interactions of goats with the environment is necessary to allow the development of practices which are productive and yet are environmentally-friendly.

So we need to examine the ways in which goats interact with their environment. Considering the goat as a domestic animal, one can say that goats eat vegetation and produce products such as meat, milk, cashmere, mohair and manure which are desired by the goat farmer.

There are two types of interaction between goats and their environment. First, goats affect the environment largely because they eat vegetation. Second, the environment affects the productivity of the goats.

In the VI International Conference on Goats Conference held in Beijing, two papers presented examples of how the goat's dietary preferences can be used to provide biological weed control. Conventional control of weeds by various chemical options is becoming less acceptable due to cost, environmental safety and social acceptability. Goats provide a realistic option to manage plant communities. Dr. Cameron Allan and Dr. Peter Holst from Australia gave details and clear pictures of the utilization of goats to control undesirable plant species and provide biological weed control in pasture and rangeland. A subsequent paper by Dr. E.N. Escobar of Oklahoma, USA, described how goats can be used to control unwanted vegetation in newly-established pine plantations.

Thus the interactions of goats with their environment should not be viewed in a negative manner; when properly managed, goats can have a beneficial effect on the environment.

Renew Now!

1997-1998 IGA Membership and subscription for the Small Ruminant Research Journal. (page 3)

Why World Food Summit

Adel Aboul-Naga, President of IGA

Over the past 50 years, agricultural production has managed to keep pace with population growth. Yet an estimated 800 million people are still chronically undernourished and 200 million children under the age of five suffer from protein and energy deficiencies.

By the year 2030, the planet will have to nourish three billion additional people. Simply maintaining current levels of food availability will require rapid and sustainable production gains to increase supplies by more than 75%.

If decisive action is not taken, the number of chronically undernourished persons will be substantially the same in 15 years time. The greatest suffering will be in sub-Saharan Africa, where food output has not kept pace with the population growth. Reversing these trends will require rapid and sustainable production gains as well as measures to make food accessible to those who need it.

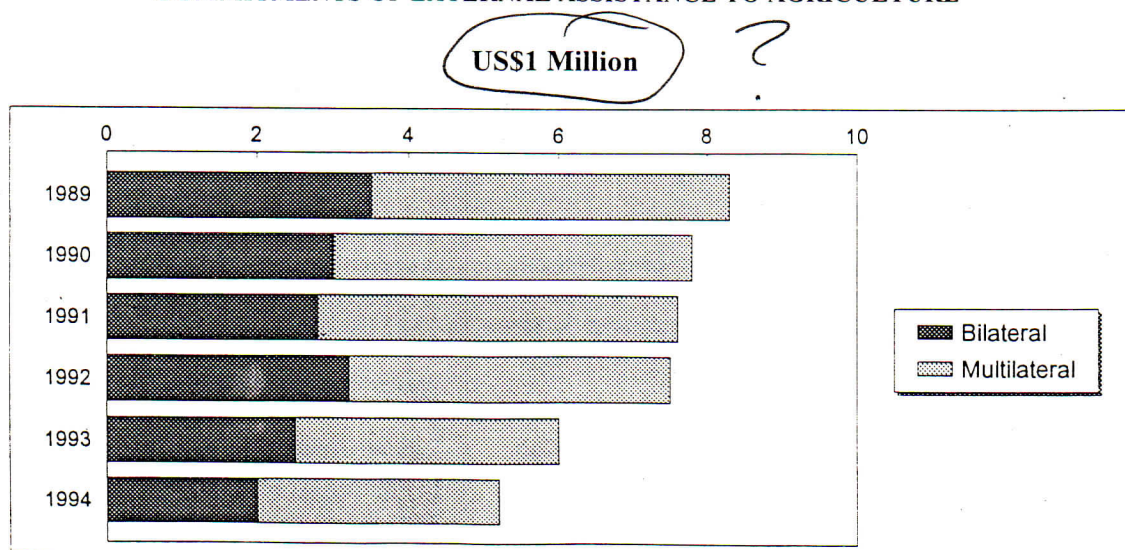
Head of States or Governments and their representatives will assemble in Rome from 13 to 17 November 1996, making a public commitments to action to eliminate hunger. WFS will provide a historic opportunity for governments, international organizations and all sectors of civil society to join forces in a concerted campaign to ensure Food Security, For All the world's people.

Participating nations have expressed their determination to agree on concrete, achievable food security goals, which they can attain individually or in partnership with others, to reduce the number of people affected by malnutrition to one half of their present number by year 2015. Actions undertaken by governments, international organizations and civil society fall into the following principal areas:

- ⇒ political, macroeconomics and trade conditions needed to foster food security;
- ⇒ policies and institutions that contribute to improving access to food for all;
- ⇒ meeting transitory and emergency food needs in ways that encourage development;
- ⇒ approaches to agricultural and rural development that encourage adequate, stable food supplies;
- ⇒ equitable involvement of all people in decisions and actions that affect their food security;
- ⇒ investment in research, extension, infrastructure and institutions for sustainable agriculture;
- ⇒ international cooperation and assistance for food and agriculture.

The goal of our association (IGA), of promoting the role of goats for humankind, is in concert with the commitment of our heads of States, towards global food security, Goats will always play a recognizable role for fulfilling the target of WFS to reduce the number of mal-nutrition people by year 2015 to half its present number, through as nutritional, accessible and affordable products, to the poor mal-nutritional people in rural areas and places where modern technology has not been or cannot be yet reached, e.g. Sub-Saharan Africa and Southern Asia where is the highest goats and human populations.

COMMITMENTS OF EXTERNAL ASSISTANCE TO AGRICULTURE



VII International Conference on Goats Tours, France, May 14-20, 2000

France is the country where the next International conference on Goats will be held in the year 2000. France mainly raises dairy goats but many other systems of production are present all over Europe and around the Mediterranean Basin.

The sessions of the conference will take place in Tours, a nice city situated at about 200 kms. south of Paris and easily reached by train within one hour. Tours stands on the Loire Valley, where royal castles were built centuries ago. An important Animal Research Center, composed of more than 150 scientist is located near Tours, some of whom will be involved in the organization of this event.

As in previous conferences, specific sessions will be organized and chaired by persons internationally recognised, on a scientific point of view. Even if science will be the main topic of this conference, the transfer of technologies to the farm, either in intensive or in extensive systems, particularly those of developing countries, will also be discussed.

Satellite symposia and technical tours will be organized in the Poitou-Charentes area, 150 kms. South of Tours, where most of the dairy goat farms and cheese manufacturing factories are found.

We can assure that we will do our best for welcoming from all over the world delegates.
For more information contact Phillipe Chemineau, I.N.R.A., 37380 Nouzilly, France.

CIRVAL

International Center of Resources and Valorisation of Information in Small Ruminants Dairy Sector.

An Initiative for the Organization of a Small Ruminants Dairy Sector in the Center of Romania, BEGHIN Region/Carpathian Mnts.

BEGHIN experimental station is situated in Romania, in the center of Transylvania, a region of natural pastures traditionally exploited for the small ruminants. The two local sheep races, TIGAIE and TURCAN, produce wool, milk and meat, with a potential of 40-45 l/lactation; TURCAN is crossed with the race EAST FRIESAN.

The local goat race CARPATON produces about a hundred liters per animal per lactation. Adapted to their environment, these populations have a great genetic potential, with the improvement of dairy prouduction and breeding.

RENEW NOW!

INTERNATIONAL GOAT ASSOCIATION MEMBERSHIP APPLICATION FORM

NAME: _____

ADDRESS: _____

COUNTRY: _____

Telephone No. _____

Fax No. _____

E-mail No. _____

REFERRED BY: _____

OPTIONAL INFORMATION

COMPANY/INSTITUTION: _____

POSITION: _____

ANNUAL MEMBERSHIP CATEGORY

	1997	1998
IGA membership (does not include the Journal)	US \$ 35.00	_____
Subscription/Publication Fee Small Ruminant Research Journal (members only)	US \$ 100.00	_____
Individual Sustaining Membership (includes Journal)	US \$ 300.00	_____
Organization Membership (does not include the Journal)	US \$ 300.00	_____

TOTAL AMOUNT ENCLOSED Check _____
Credit Card _____

For a credit card charge please print the following:
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Kind of card (circle one) VISA MASTERCARD

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TOTAL AMOUNT CHARGED US\$ _____

Make check payable to International Goat Assoc., US\$ if possible
Please forward the membership form along with your payment to:
Rosalee Sinn, IGA, 1015 Louisiana Street, Little Rock, Arkansas,
72202, U.S.A. or give to your IGA Country Representative, or
Board member.

*\$ Full Membership 135.00
Includes Small Ruminant
Research Journal 3
Membership \$35.00
Does not include*

Italian Initiative

In Italy, from the initiative of some IGA associates is born ANFOSEC an association which wants to safeguard and valorise cheeses made solely with milk from grazing animals. "Cheese under the sky" are different from other cheeses because, due to direct utilization of the grass, cheeses can be produced with a stronger, more harmonious flavour. In addition to this, the cheeses have higher contents of unsaturated fatty acids and antioxidant substances. Also the grazing is near to a natural ecosystem which respects the animal's well-being.

Above all, ANFOSEC'S attention is centered on the consumer. ANFOSEC will soon organise an information campaign which enables them to know the specificity and the organoleptic characteristics of these cheeses. Furthermore, ANFOSEC will certify, with its discipline, that cheeses of the brand "cheeses under the sky" are made exclusively with milk from grazing animals.

Periodically ANFOSEC's associates will receive a newsletter covering information on its associative activities.

The review "Caseus" is published by ANFOSEC, so it wants to try stimulating studies, reflections and discussions about the whole production system of cheeses produced with milk of grazing animals. So from the pasture's grass, to animals, cheeses, to the distribution, consumers, Caseus pretends to speak and interest transformers, technicians, gastronomers, students: a very variegated and heterogeneous public but with a common denominator: the fine pleasure of arranging and tasting a different and specific cheese. Caseus wants also to be a cohesion's element among Anfosc's members.

— Roberto Rubino

Announcements

- 1.- Ad hoc Meeting of Donors and other Stakeholders in Animal Genetic Resources.
Dec. 2 & 3, 1996. FAO Headquarters, Rome, Italy
- 2.- The University of Queensland in conjunction with a number of researchers and commercial producers in Australia will be conducting an international training course entitled Goat Prod.Tech. for Fibre and Meat in June/July, 1997. For information: B.W. Norton, B. Restall, R.C. Gutteridge
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Brisbane Qld 4072 Australia
Telephone +61 7 3365 2062
Facsimile +61 7 3365 1188

Small Ruminant Research Report

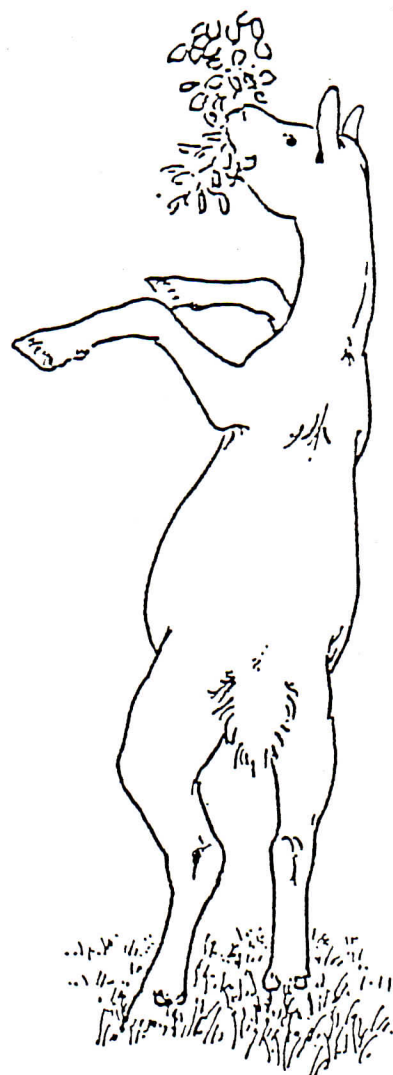
June-October 1996

Mohamed Fahmy, Editor-in-Chief

From June first to October first the editorial board has received 90 manuscripts, 39 dealing with goats, 41 with sheep, 9 with both goats and sheep and 1 with other ruminants.

Of these 79 articles 9 were rejected either because they did not fall within the scope of the journal, or were not recommended by the reviewers. So far only three papers were accepted, subject to revision, the remaining are still in the reviewing process.

The number of papers dealing with various subjects is: 13 genetics, 4 systems, 20 nutrition, 22 physiology, 10 production and 21 health. Of these papers, 13 come from Africa, 25 from Asia, 37 from Europe, 8 from North America, 6 from Central and South America and 1 from South Pacific.



**International Goat Association
Officers and Board of Directors Meeting**

Saturday, November 30, 1996
AGA, FAO Building
Rome, Italy
1:00 p.m. - 6:00 p.m.

Provisional Agenda

Review of VI ICG - Beijing, China, May 1996
Report on Small Ruminant Journal
Committees and Country Representatives
By-laws Review
Report on Membership
Discussion of VII ICG and Scientific Program

**Status and Prospects of the
Dairy Goat Industry in the United States**

*Department of Animal Science and Agricultural
Biochemistry University of Delaware, Newark
19717-1303*

Abstract: Among the major classes of US livestock, dairy goats have yet to achieve USDA statistical reporting of their numbers, amounts of milk produced and processed, and cheese and other products marketed. However, the USDA has published buck proof of approximately 16,000 does annually from Dairy Herd Improvement Association (DHIA) records of Alpine, LaMancha, Nubian, Oberhasli, Saanen and Toggenburg breeds, thereby encouraging genetic progress. This represents a 1% participation in DHIA of the estimated 1.5 million US dairy goats. Annual breed registrations are led by Nubians (11,000), and the leading states in descending order are California, Texas, Ohio, New York, and Pennsylvania. Breed average milk yields range from 960 kg of milk for Saanen to 726 kg of milk for Oberhasli. Average milk contents range from 4.5% fat and 3.69% protein for Nubian to 3.3% fat and 2.98% protein for Toggenburg. Leading lactation records are 3,023 kg of milk (Toggenburg) and 174 kg of fat (Nubian). Total annual registrations are 45,000+ animals by 16,000+ member breeders. Estimated total US goat milk commercial production is 24,000+ t, with half going into commercial farms goat cheese production of 640+ t. Recent years have seen significantly increased numbers of dairy goat research projects and publications from Oklahoma, Texas, California, Georgia, Alabama, Florida, Louisiana, New York, Connecticut, Delaware, and Massachusetts. Furthermore, annual national and international symposia, annual national goat cheese judging competitions and workshops, and active national goat research foundation, representation on the National Interstate Milk Shippers Committee and Mastitis Council, and formation of a national association and council for the development and promotion of dairy goat products indicate an evolution from former emphasis on purebred breed development to a focus on market development. The conclusion is that dairy goats are emerging as a necessary and recognized US industry. (Full paper available by writing to IGA)

George Haenlein receives Worrilow Award



The editors of Small Ruminant Journal: Tilahun Sahl, George Haenlein (former Editor-in-Chief), Mohamed Fahmy (Editor-in-Chief), David Sherman.

Each year, the University of Delaware Ag Alumni Association present the Worrilow Award to a graduate who has exhibited outstanding service to agriculture.

George Haenlein was recently honored. Many of his technical and popular publications with dairy goats have helped establish the US dairy goat industry, especially with the widely acclaimed *Extension Goat Handbook* and the first nutrient requirements bulletin commissioned by the NRC. He was the founder in 1989 and Editor-in-Chief of the monthly international publication, *Small Ruminant Research Journal*.

Raising Cashmere Producing Goats

Talibah Al-Rafiq and Ajamu Al-Rafiq

California Cashmere Co., USA

INTRODUCTION

California Cashmere Company and Al-Rafiq Ranch is located in the Sierra Foothills of Calaveras County, some 600 meters above sea level. We are about 256 kilometers north east of San Francisco, in the heart of California's 1849 "Gold Rush" region. Some small scale mining operations are still producing today. The average mean temperature ranges from 7 to 10 degrees Celsius with light snowfall January through March. The topography offers gradual to steep rolling hills and small valleys populated with oak, fir, cedar and pine trees. It is not uncommon to find old growth cedar and pine trees 32 meters tall. Rainfall is seasonal ranging from October through May. Natural vegetation culminates in June and early July, and growth ceases leaving a golden brown hue to the hills. The progression from wet to dry in some areas is more rapid depending on northern or southern exposure. Our ranch has a northern exposure and could be classified as dry six to seven months out of the year. Wildlife indigenous to this area is the mule deer, gray fox, ground squirrel, snowshoe rabbit, raccoon, rattle snake and mountain lions. In recent years the population growth of the local (about 4% per year) has caused a decline in the majority of this wildlife. The mountain lion population is the exception. Light manufacturing and timber production are leading contributors to the counties economy. Calaveras County Economic Development Company also reports cattle, horse, sheep and goat ranching as important industries. There are fewer than 15,000 head of goats in California. The majority are Angoras, which are used for meat and mohair. The Spanish goat is occasionally found here in the Sierra foothills and in Southern California. There is a sizable milk goat population spread throughout the state. Also, there is a small but growing number of cashmere producing goats.

DISCUSSION

Our true goat raising experience begins in 1987 with the purchase of eight Spanish goats. Very early in this educational process we became aware of the woeful lack of information regarding raising cashmere producing goats. Our in-depth research revealed superficial information about these animals. We turned to our local veterinary hospital and clinic to find that no one there specialized in small ruminant research. The challenge was ours. We persevered with our practice herd of Spanish goats. We read all available information about milk goats and learned a lot about sheep, applying the "It works for Sheep" principle to

the goats. Incidentally, we purchased and are still raising a small herd of fine wool sheep. The University of California at Davis small ruminant department provided valuable research and reference material to support our efforts. In late 1989 (still glowing with naiveté and feeling that we had acquired 99.9% of all there is to know about raising cashmere producing goats) we felt quite comfortable with our "knowledge base" and decided to move forward with our plans. About one year later we came to realize inadequate of our "knowledge."

In 1990 we purchased a small herd of cashmere producing goats. These animals are direct descendants of the Australian Karakan herd introduced to the United States in 1987. Next we developed a database to track herd ancestry, health maintenance and fleece production. Each animal has a unique identification number. The identification number provides the link between ancestry, production and health information. Standard and ad hoc reports are generated using random field(s) within the database. On demand reports are generated for individuals, groups of individuals and/or the entire herd. Ancestry records include birth date, weight, color, gender, birth indicators, herd status and sire/dam identification number. Yearly health and fleece records track symptoms, diagnosis, treatment, preventive measures/medicine and fleece profiles. Health and fleece records also include event-date, type of medication, animal weight, fleece weight and fleece characteristics, etc.

Preventive maintenance means keeping the animals healthy and free of disease. We accomplish this through continuing education, adhering to schedules, obtaining professional advice and common sense. The herd is treated for gastrointestinal and external parasites semi-annually. These preventative measures and hoof trimming are performed in March and September. We have used the same wormer since 1987 and have not experienced an increase in parasite load. Observing the animals is an intrinsic part of feeding and care. Severe problems have been avoided by noticing behavioral changes and taking corrective action.

Feed & Water: The initial phase of our breeding plan was to increase the herd size and maintain healthy animals. We accomplished this by providing 100% of the animals nutrition with free-choice access. Nutritional needs are provided through grain, oat and grass hay. Each paddock has an abundance of oak and

pine trees. Leaves, acorns, pine needles and pine cones blanket the ground in season. The goats eat these without apparent harmful affect. Feed in California is very expensive, alfalfa, oak hay and grains are at the top of the list. This makes feeding grass hay very attractive to us and the goats seem to love it. Alfalfa, oak hay and grains are high in energy, therefore, we use them during kidding and one to two weeks after shearing. Bales of grass hay are placed in feeders designed to hold two standard rectangular bales. The feeder holes are rectangular and circular some 30 centimeters in diameter. Feeders are about 2.4 meters long and .6 meters wide with four holes on each side and one hole at each end. They stand about .6 meters above the ground and can be end-loaded or top-loaded by lifting the top. Feeders could be pushed over, causing injury to the animals, if not properly supported. Goats are notorious for wasting food. This feed loss adds significantly to cost. A clean continuous water supply is essential. Our experience is that the animals consume water at different times throughout the day and night. We installed standard livestock waterers to provide a constant supply of fresh, clean temperature controlled water. This eliminates the laborious task of carrying water up and down hills. The waterers are installed on a shared fence line between two paddocks. In addition to foraging, the animals have free-choice access to water and feed year-round.

Shelter: Each paddock has two shelters, one 2.4 meters squared and stands 1.8 meters in the front and 1.2 meters in the rear. This shelter is supported by fence post set in concrete with plywood sides and tin roofing. The second shelter was designed specifically to avoid overcrowding and possible harm to kids during wet, cold and snowy weather. It is 2.4 meters by 1.2 meters and stands 1.5 meters in the front and .9 meters in the rear. The top of these shelters are made of plywood instead of tin. They are not set in concrete and can be moved around the paddock as needed. The shelters longest open side faces east with a slight angle to the south for protection from wind and rain. The floors are covered with bedding straw and are cleaned semi-annually. Generally, the animals seem to prefer sleeping in the open and use the shelters only during the wet and cold weather.

Kidding: Kidding starts in January. We do not provide birthing stalls or a barn, the does will select an area under a tree or in a shelter. Shortly after bonding with the mother they are tagged and birthing data is recorded. We have not intervened or assisted during kidding. Our does have excellent birthing and nurturing instincts. Occasionally, younger does will drop a kid in an unsheltered area. We simply move the newborn into the shelter and the mother will follow. On occasion, a kid will be adopted and welcomed to take

milk with a new sibling. Kids are standing within minutes of birth. Flushing (providing higher energy feed one month before breeding) seems to increase the number of multiple births. Our kidding rate is well above 100%. We consistently have more females than males during kidding.

Shearing: We combed our first year fleece harvest. This harvesting process takes about fifteen to twenty minutes per animal. We perceived this to be an unpleasant experience for the animals. Combing and brushing has the advantage of yielding a higher percentage of cashmere to guard hair, however, this may be impractical for large operations with limited resources. Having a small herd during the first shearing year afforded us the opportunity to develop an efficient shearing system. Our current system "ALP" (Assembly Line Process) allows us to examine the animal, collect fleece samples, shear, record the identification number and bag the fleece. After shearing the fleece bags are weighted, classified and sorted by color. Samples are kept for historical reference.

CONCLUSION

Raising Cashmere Producing goats in the foothills of California has been rewarding. Among the many rewards is a bucolic lifestyle, the many new friendships we have developed during our travels, the knowledge, experience and skills we have gained and a clear direction for the future. Today we are applying our well developed (yet incomplete) knowledge to a larger operation, producing fine quality cashmere.



Peter Holst, IGA Board Member, with Cashmere Goats in China.

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