AND

SUPPORTERS



MEMBERS

There is a lot of news for this issue of the Newsletter.

**CONFERENCES IN 2007 & 2010** 

Germany, Israel, Japan, Morocco, Namibia,

Netherlands, Peru, Spain, Switzerland, United

A decision has been made by the Scientific Committee, which supports the conferences, to hold the 4<sup>th</sup> International Conference on Fog, Fog Collection and Dew in La Serena, Chile, in 2007. This will be an exciting opportunity to not only experience the wonderful country of Chile but also to visit an operational fog collection site. Please plan to attend and tell your colleagues to put it in their schedule for July 2007. The chair of the meeting will be Professor Pilar Cereceda and the Conference Program Director is Professor Pablo Osses, both of the Pontifical Catholic University of Chile in Santiago. The Scientific Committee has also decided to award the 5<sup>th</sup> Conference in 2010 to the University of Muenster, Germany, with the chair being the distinguished Professor Otto Klemm. Some of the finest research on fog has been done by university groups in Germany and this will be an excellent focus for the meeting.

With the movement to the next conference, the scientific Committee will also change. Our thanks go out to Professor Detlev Möller from Germany and Professor Simon Berkowicz from Israel for their fine work as chair and vice-chair for the last several years. The new chair will be myself, Robert Schemenauer from Canada, and the vice-chair will be Professor Otto Klemm from Germany. The Scientific Committee will itself will be reformed with a mixture of present and new members over the next few months.

OF

FOGQUEST

FogQuest's role is to encourage people in the development community to be involved in the conference. This can be to present results from current water projects using fog collectors and also to learn about how this technology may help communities in their countries. We very much encourage our members to attend the 2007 Conference and to promote the conference as widely as possible. FogQuest will look for some sponsorship funds to assist delegates in developing countries to travel to the conference in 2007.

### SPECIAL JOURNAL ISSUE

Simon Berkowicz has taken the lead in arranging for a special issue of the journal Atmospheric Research to carry papers that were presented in the 3<sup>rd</sup> Conference in Cape Town in 2004. As guest editor he is presently organizing the submissions. This is a large task and he will appreciate the cooperation of all authors. You may contact him directly for more information berkowi@vms.huji.ac.il.



NEWSLETTER

FOR

Kingdom and the USA.

Editor
Dr. Robert Schemenauer

Contributions of short articles, news items and photographs for upcoming issues of the Newsletter are welcome.
They should be sent to: FogQuest@rogers.com or to the address at the end of this Newsletter.

The Newsletter's primary purpose is to be a means of exchanging information with our members. We hope that it will also promote better communications between those working on water projects using fog, rainfall and dew collection, and those studying the many scientific aspects related to these atmospheric water sources. The Newsletter is sent three times a year to members of FogQuest: sustainable water solutions. The current issue is available on the web site www.FogQuest.org. Information on membership can also be obtained on the web site



This SFC at Embatkala, Eritrea, is producing an average of 3.6 L of water a day and this is being used by the people while the measurements are being taken.



This is the humble home of the lady and her daughter who make the SFC measurements at Embatkala, Eritrea. Clean water is an urgent priority for improving their lives.



Eritrean homes in the village of Amadir.



The SFC in Arborobu, Eritrea, is a curiosity for the children.

## CURRENT AND UPCOMING PROJECTS

Our main focus at the moment is the core group of water projects in Chile (Falda Verde and Cerro Talinay), Guatemala (La Ventosa and area) and in Eritrea (Arborobu and Nefasit). The projects in Chile were discussed in the last issue. With funds from the Rotary Club of Missisauga, Canada, FogQuest is able to assist the community working at Falda Verde with four, new, large fog collectors, which will bring an additional 300 L of water a day to this arid site. At Cerro Talinay the olive plantation using fog water is beginning. Water from the



Berhane Woldemichael, Director of Haben (Eritrea); Kerstin Anker, Director of WasserStiftung (Germany); and Serai, a Haben staff member; at one of the SFC sites in Eritrea.

six LFCs will go to a 5000 L tank and then to a drip irrigation system for the olives. The municipality of Canela is very involved as is their Agricultural School. The update on the project in Guatemala is provided on the next page. The water project in Eritrea is moving forward well. At this time we do not know if we will be building ten or forty LFCs this fall. Our partner in Germany, WasserStiftung, has a proposal

submitted to look for the additional funds we require for the larger project. It would be done with our Eritrean partner Haben and the communities of Arborobu, Nefasit, and possibly Embatkala. All of these are located quite close to the capital city of Asmara. Poverty is prevalent in the rural areas and the lack of water is a serious health issue especially through the winter when there is no rain.



# WHAT IS FogQuest?

FogQuest is an innovative, international, non-governmental, non-profit organization, which implements and promotes the environmentally appropriate, socially beneficial and economically viable use of fog, rain and dew as sustainable water resources for people in arid regions of developing countries.





Melissa Rosato and Jonander Rosato at the May FogQuest display in Chautauqua, N.Y. This was at the Rotary District 7090 annual meeting.

### **HOW CAN YOU HELP?**

Please consider taking out a membership in FogQuest. A solid network of members will be our means of spreading information on fog collection and generating support that is vital to our operations. The annual membership fee of \$35 Canadian, or \$30 US for those outside of Canada, can be paid by check or by credit card. Corporate membership is \$200 CAD. We accept VISA or MasterCard. Students receive a \$5 discount on their membership fee. Donations from both individuals and institutions are encouraged and can be directed for general support or to our projects in Guatemala, Chile, Venezuela and Nepal.

### FOG COLLECTION PROJECT

### La Ventosa, Guatemala

The fog collection project for the village of La Ventosa began in the last year after civil unrest forced us to move away from the earlier sites near Lake Atitlan. La Ventosa is a small isolated rural village in the western highlands of Guatemala. It is 10 km from Todos Santos Cichumatán and in the Department of Huehuetenango. The 60 people have a serious water shortage and are motivated to assist in solving their problem through the construction of large fog collectors. The Lutheran Church in Guatemala is also active in assisting the community and has constructed a large 120,000 L reservoir to collect rainfall runoff in the summer when there is a lot of precipitaation. In the winter, precipitation is less than 20 mm a month.

In May, Rick Taylor went from his home in Fonthill, Ontario, Canada, to Guatemala to build four large fog collectors in La Ventosa. Our Chilean intern, Virginia Carter, went as well, from Santiago, to help with the construction and to have an initial look at the two other communities discussed below. The funding for the LFCs and water tanks was from generous donations made to FogQuest from students and staff of St. Francis High School and Denis Morris High School in St. Catharines, Ontario, Canada. Two of the LFCs were built right in the village. The fog water will go first to a new 2000 L plastic water tank and the overflow will go to an in-ground reservoir. The same approach is being taken with the other two LFCs, which were constructed a few hundred meters away. The men and women of the village played an active role in the construction and will maintain the LFCs. Our assistant in Guatemala, Daniel Jiatz, will visit the community every two weeks for the immediate future, to ensure that everything is working properly. He will also continue to build confidence in the community that this can be a sustainable water supply for their future.

# FOG COLLECTION EVALUATION Xapper & Tiactac, Guatemala

During the field project in May, Virginia Carter went north of La Ventosa to examine several villages near San Mateo Ixtacán. This is where another NGO, Ixtatán Foundation (Fundación Ixtateca), under the guidance of Beth Neville Evans has been working with rural communities for several years. Virginia visited Xapper and Tiactac and found the water needs and the poverty both acute. People were walking for hours to access marginal water supplies for their families. We are presently discussing with Beth how we can work together to help the communities. This will begin with an evaluation using SFCs in the next few months. Xapper has about 300 people and is at an altitude of 2240 m. Tiactac has 110 people and is at 2565 m. Both villages have schools. Tiactac's only available water source is spring called La Joya about 4 km away. Otherwise, both communities rely on what rainfall they can collect and store.



The children of La Ventosa, Guatemala, will be one of the main beneficiaries of the fog water.



Daniel Jiatz, Virginia Carter, Rick Taylor and Eiji Kobayash who worked on the LFCs for La Ventosa.



Men from the village of La Ventosa working on the bases of the LFCs.



The mesh being sewn onto the support cables for the LFCs in La Ventosa.



Virginia Carter and Beth Neville Evans meeting with the community of Tiactac, Guatemala.



Virginia Carter and Beth Neville Evans meeting with the community of Xapper, Guatemala



The school in Xapper, Guatemala.



LFCs 1 & 2 in the village of La Ventosa.



St. Francis and Denis Morris High Schools provided some t-shirts for the young people in La Ventosa, Guatemala.



Standard fog collectors at the KM 18 site near Cali. Colombia.

### TO CONTACT FogQuest

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### 4<sup>th</sup> INTERNATIONAL CONFERENCE ON FOG, FOG COLLECTION AND DEW LA SERENA, CHILE JULY 2007

The next conference has just been granted to Chile. It will be held in La Serena, which is about 500 km north of the capital city of Santiago. La Serena is an old colonial city of about 250,000 people with a modern beach resort area. Despite having only about 100 mm of annual precipitation, grapes for wine as well as fruit are grown in the nearby Elqui Valley. During the conference, tours will be offered to the fog collection site at Cerro Talinay and to the Elqui Valley. The conference Chair, Pilar Cereceda, and the Conference Coordinator, Pablo Osses, are both active FogQuest members. For more information contact Profesora Cereceda at dcereced@puc.cl

**2004 Conf.:** The conference was organized by Professors Hannes Rautenbach and Jana Olivier of the University of Pretoria in October 2004. For more information, please contact Professor Rautenbach at hannes.rautenbach@up.ac.za. You can reach the conference website through the FogQuest site.

**2001 Conf.:** You can still purchase copies of the Proceedings Volume of the 2001 Fog Conference through FogQuest. It is an important addition to a personal or institutional library.

### **STUDENTS**

Lesley Crittenden, Wendy Eitzen and Jessica Junker are doing a project in the Civil Engineering Department at the University of Waterloo, Canada, to measure the forces on the different support cables of a large fog collector. Javiera Espinosa and Margareta Canepa are doing projects on the possibilities of introducing tree plantations into the arid areas near the Cerro Talinay and Falda Verde fog collection sites in Chile. They are students with the Geography Institute of the Pontifical Catholic University of Chile in Santiago and will utilize results from an earlier fog collection project near Mejía, Peru. Alysa Nahmias is a Masters student in architecture at Princeton University in the USA. She is working on a design project in the Canary Islands, Spain, and will incorporate a fog collection component. An architect in Monterey, California, USA, Scott Shell, is designing a school where several small fog collectors will be placed as architectural

elements and teaching tools.

#### **NEWS**

Sampurno Bruijnzeel of Vrije Universiteit, in The Netherlands, has been awarded the prestigious Busk Medal for 2005 by the Royal Geographical Society in London for his "biosphere research in the humid tropics." Congratulations for the well deserved recognition! José Manuel Molina of the Universidad Nacional de Colombia has a new fog collection evaluation project in an area called KM 18 near Cali, Colombia. Fog collection rates have been good and there is a community in need of water in

the vicinity. Pilar Cereceda of the Geography Institute, of the Pontifical Catholic University of Chile, has been raised to the level of Titular Professor, the highest rank at the university. Our congratulations!

María Victoria Marzol of the University of La Laguna, Tenerife, Canary Islands, Spain, has a new book out on fog collection in the Canary Islands. You can contact her at mmarzol@ull.es if you are interested in a copy.



Left to right: Jessica Junker, Lesley Crittenden and Wendy Eitzen. They are civil engineering students working on a fog collector project at the University of Waterloo, Ontario, Canada.

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