Educators of several Latin American zoos worked together in a joint effort of education and conservation on one of the most representative species of the region: the jaguar (*Panthera onca*), launching a campaign that sought to provide education and communication strategies to be applied in their own institutions and all those willing to be a part of it. It was developed as a regional strategy to strengthen Latin American educational processes around a common interest: the conservation of our species and the preservation of our history and culture through them (Gómez, 2014).

The initiative for this project came during the Latin American Symposium of Educators of Zoos and Aquariums held at Zoológico Guadalajara, Mexico, in August 2013. The importance of education and conservation programs on the jaguar and of the collaborative work to help improving the regional education programs as well as unify training, techniques, and information in conservation education was highlighted (Cruz, 2013).

The choice of the jaguar as flagship species for this first campaign was because its natural range includes most of the Latin American countries, from Mexico to Argentina (EOL, 2015), it’s a charismatic species, of great beauty and interest, on the IUCN red list near threatened (IUCN, 2015) but it is an endangered species in some countries of its natural distribution (DOF, 2013) illegal trade being one of the main threats (CITES, 2013), besides being an “umbrella species” i.e. the efforts for its conservation represent the conservation of a large number of species in their ecosystems.

According to the educational aspirations of a 21st century zoo (WZACS, 2005), of making a common effort to revitalize and re-focus education and training programs; develop appropriate resources; make direct links with in situ work; and engage with public needs, behaviour and aspirations, educators wanted to make the most of their resources from both, formal and non-formal education. Coinciding with other similar proposals, the campaign was to be fun, experiential, participant centered, informational, motivating, inspirational, age appropriate and use a variety of learning styles (Lowry, 2009). Moreover, it was desirable to connect the participants with this species and its habitat through rediscovering their ancestral history and traditions.

The participants were required to sign a commitment letter to register as participant institution for the campaign; it was signed by the director and the education coordinator. Then, the education department adapted the campaign resources to their situation. There were 3 resources: a manual that was a guide to help education staff to design an institutional campaign program; a Facebook page for Latin American educators, sharing the advances, programs, news and photos from the activities; and a Jaguar-Mochila (backpack); a Dropbox folder where educators could share their own materials to make them available to others.

There were two opportunities to deliver the education program: on April 30th, declared Latin American Jaguar Day; and a particular date when all the institutions worked on the same topic, informing the participants that all the zoo and aquarium visitors in the region, were working on similar activities, and the
campaign itself, which activities were planned according to every institution’s resources, capacities, strategies and programs.

Content:
• The importance of the jaguar in the prehispanic past, symbol of strength and power.
• Fundaments of jaguar biology
• The jaguar and its habitat conservation crisis, current efforts for its conservation.
• Role of zoos and aquariums in the conservation of the jaguar.
• Participation of the society in conservation actions.

Key education messages:
• We all are connected, human survival depends on jaguar and its hábitat survival.
• Latin American wildlife is one of the biggest shared treasures.
• People can act to support jaguar conservation.
• Protecting its natural hábitat is a key action for jaguar conservation.
• Jaguar plays an important role in its ecosystem, by protecting the jaguar we protect many other species.
• The purchase, sale or export of jaguar products is prohibited.
• The future of wildlife depends on our daily actions. What are you willing to do today?
• Zoos and aquariums play an important role in jaguar conservation.
• Society plays an important role in conservation strategies.
• The jaguar will transcend through time and through our Latin American borders

Evaluation:
As part of the campaign, every institution could implement their preferred mechanisms of evaluation. The main mechanisms used for the evaluation of the activities were:
• Diagnostic testing:
Used to assess the previous knowledge that participants had on the topic. It was generally basic and confusing. Specially the ecological role of the species and the importance to their environment as well as the zoo efforts to promote jaguar conservation were unknown.
• Formative evaluation
Used to adjust teaching and learning processes to improve student attainment and to guide the attention of the participants to the relevant information sought to emphasize.

• Summative evaluation:
Used to determine if expected knowledge, skills and attitudes for the conservation of the species were generated. It was also used to show participant’s satisfaction for the activities undertaken.

Results:
1. Quantitative results
1.1 Institutions, countries and activities:
A total of 10 zoos and aquariums from 5 different countries participated in the campaign, developing activities depending on their institutional possibilities, as stated in the manual.
1.2 Participants:
A total of 35,249 reported visitants participated in the activities of the campaign at the different institutions in 2014 (figure 3). Not all the institutions were able to share their results.
1.3 Age groups
Most institutions classified their participants in 3 different age groups, as an example it is shown the number of participants per age group in Zoológico de Buenos Aires, Argentina (figure 4). Although most of the activities were addressed for children, some institutions prepared activities for less represented age groups.

1.4 Previous knowledge and knowledge assets
The documentary “Jaguar, lord of the mayan jungle” was presented to inform teenagers and adults on the main strategies to promote jaguar’s conservation in Mexico. This documentary was accompanied with a formative evaluation driven by a 10-item survey intended to measure the assets when being applied during the activity. It was also applied as pre-test to measure previous knowledge.

The average result from the survey applied as pre-test was 3.5 and the average result when
applied during the activity was 8.5, showing there was a slight previous knowledge and an important knowledge asset when accompanying the activity. Teenagers showed larger previous knowledge and larger knowledge assets (Figure 5). This is probably because evaluated teenagers were from a single educative institution and adults were a group with a more diverse educational background.

The documentary informed the participants on jaguar’s habitat, major threats and the main strategies to promote its conservation. They were able to identify jaguar’s habitat and threats and list all the strategies. After the evaluation process, the survey continued being applied during the presentation of the documentary and visitors were allowed to take their questionnaire home or deposit it in a mailbox that allowed us to track the process.

2. Qualitative results:
Most institutions designed and applied surveys to assess knowledge, attitudes, values and behaviors. As an example, Buin Zoo designed a 7-item survey from which 5 items were related to knowledges; 1 with attitudes and behaviors and 1 with values. They concluded that educators must make the most of our animal collection by accessing interdisciplinary information for the design contents and resources for participants of different ages and backgrounds, including aspects of ethnosciences, anthropology, arts and psychology as an integrated multidiscipline.

Some institutions used surveys to know the level of satisfaction of the participant with the activities. Most of them showed high standards including the processes of visit planning, visitor service and objective fulfillment.

2.1 Benefits:
- Gathering diverse literature by educators.
- Develop educational and communication materials of many types.
- Increasing of education staff training to prepare activities.
- Involvement of other areas of the zoo (managers, veterinarians, enrichment, caregivers, communicators) in this education campaign generating a multidisciplinary work.
- Increased knowledge in participants about the species and its habitat
- Generated interest in communities to participate in the conservation of the jaguar.
- Involvement of educational departments of tourism and environment ministries, educational institutions and community groups interested in the subject.
- For educators, training on the subject was very interesting.

2.2 Opportunities for improvements
- Optimized education staff training
- Reinforced training on evaluation processes
- Increased contact and work with communities
- Address the campaigns to the right target audience

Conclusions:
The jaguar education and conservation campaign was a successful approach to promote collaborative work involving ten institutions from five countries within Latin America, accomplishing the goals of increasing participants’ knowledge on the biological and ecological importance of the jaguar, generating caring attitudes and promoting conservation behaviors using cultural and traditional knowledge as the key component to engage people with the conservation messages.

This campaign was very interesting as a first effort for Latin American Zoos and Aquariums to collaborate on a common objective, and boost our own potential to give our visitors access to a multidisciplinary and inter-institutional experience. For them it was surprising
to know that zoos work together for wildlife conservation and their participation by adopting simple behaviors is crucial to reach this goal. The strategy of considering common ancestral history and traditions was very important, because it allowed participants to feel engaged with the values of our cultures.

This regional campaign was attractive for non-education staff, from directors to keepers and vets who showed interest in these activities and were willing to participate, enriching the activity design and enhancing the overall experience to visitors.

Online resources such as social networks, cloud storage services and virtual chat platforms proved to be useful tools to increase participation and improve communication between educators in spite of distance. Its use had significant impact in program designing and resource sharing.

The information, resources and results showed a synergic effect, increasing the opportunities of the education departments to develop optimized experiences for our visitors. This work needs to be continued to improve the education practice in our institutions, allowing them to reach international standards such as the proposed by WAZA and other zoo and aquarium associations.

Sources:
Cruz Morelos, María de los Ángeles; Toledo Pineda, Andrea; Rubio Rocha, Yamel G; Martínez Arizmendi, María Eugenia. 2013. Propuesta Educativa: programa de apoyo al conocimiento sobre la importancia del jaguar (Panthera onca) en América. Simposio Latinoamericano de Educadores de Zoológicos y Acuarios. México.

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**A Latin American Experience: Education & Conservation Campaign of the Jaguar at the Buenos Aires Zoo**

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**Summary**

During 2014, the Buenos Aires Zoological Garden took on, for the first time, a specific role within a Latin American education campaign. To accomplish our commitment a series of actions were raised. These actions are related to the species within the various proposals of the Institutional Educational Project of the Zoo. The activities were mainly aimed at visitors (children, young people and adults) and the children participants of the non formal education program of the Zoo.

**Introduction**

The Buenos Aires Zoological Garden has always been linked to the social and cultural development of the city, its eighteen hectares in the “Palermo” (one of the most important capital neighborhoods) are a meeting point, a unique confluence of Buenos Aires’s citizens “porteños” and tourists from different parts of the country and the world for over 100 years. This location increases the responsibility of promoting its development and its approach to topics related with environmental education, conservation and preservation of natural and cultural heritage. The Zoo has a wide range of educational possibilities offered not only by the animals that make it a unique place in the city of Buenos Aires but by the integration of the landscape with its natural and cultural heritage.

Currently, the direction of Environmental Education of the Zoo of Buenos Aires City