

Report of Strategic Membership Survey 2015

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IBA Strategic Planning Committee

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Introduction

The International Association for Bear Research and Management (IBA) is a small but very diverse and international organization open to professional biologists, wildlife managers and others dedicated to the conservation of all bear species. It supports the scientific management of bears through research and distribution of information.

The mission statement of the IBA (<http://www.bearbiology.com/index.php?id=about0>; accessed on May 30, 2016):

1. Promote and foster well-designed research of the highest professional standards.
2. Support sound stewardship of the of the world's bears through scientifically-based population and habitat management.
3. Publish and distribute, through its conferences and publications, peer-reviewed scientific and technical information of high quality addressing broad issues of ecology, conservation and management.
4. Encourage communication and collaboration across scientific disciplines and among bear researchers and managers through conferences, workshops and newsletters.
5. Increase public awareness and understanding of bear ecology, conservation, and management by encouraging the translation of technical information into popular literature and other media, as well as through other educational forums.
6. Encourage the professional growth and development of our members.
7. Provide professional counsel and advice on issues of natural resource policy related to bear management and conservation.
8. Maintain the highest standards of professional ethics and scientific integrity.
9. Encourage full international participation in the IBA through the setting of conferences, active recruitment of international members and officers, and through financial support for international research, travel to meetings, member ships, and journal subscriptions.
10. Through its integrated relationship with the Bear Specialist Group of the World Conservation Union (IUCN)/Species Survival Commission, identify priorities in bear research and management and recruit project proposals to the IBA Grants Program that address these priorities.
11. Build an endowment and a future funding base to provide ongoing support for IBA core functions and for the IBA Grants Program.
12. Support innovative solutions to bear conservation dilemmas that involve local communities as well as national or regional governments and, to the extent possible, address their needs without compromising bear conservation, recognizing that conservation is most successful where human communities are stable and can see the benefits of conservation efforts.
13. Form partnerships with other institutions to achieve conservation goals, where partnerships could provide additional funding, knowledge of geographical areas, or expertise in scientific or non-scientific sectors.

IBA wishes to maintain relevant to its membership as well as grow as a professional organization, both in terms of members as well as in recognition as “THE” source of science-based knowledge and information about bears worldwide. IBA Council therefore decided during its meeting at the conference in Thessaloniki, Greece, in fall 2014, to establish a strategic committee (SC). The goal of this SC should be to evaluate the current state and status as well as provide ideas about future development and evolution of IBA. The SC first step was to design a membership survey with the goal to better understand the impression of the membership about the IBA strengths and weaknesses, and how IBA should develop in the future.

Methods

A survey (see below) was sent out to the entire membership via the online survey development cloud-based software SurveyMonkey (www.surveymonkey.com) in 2015. The survey consisted of a standard introductory text as well as questions with some preselected categories as answer possibilities and open questions.

I used descriptive parametric and non-parametric statistics for analyses, except in cases where other methods are listed. In cases when respondents were living or working in more than one country, the first country listed was used for analyses. Note that data availability and thus sample size varies between questions and analyses.

Survey answers to questions 9-14 were categorized based on the content of answers. Categories were established that represent one major train of thought. Because an answer to a specific question usually contained several thoughts, suggestions or topics, an answer could be split into several categories. Note that categories are not mutually exclusive, and that responses may contain thoughts that could be sorted into several categories. In these cases, I have either tried to use the category representing the main thought, or if this was not possible, then a response was listed in two categories (however, this was very rare!). Categories were then summarized per question in table format as well as representative graphs.

I have defined the most important response categories by setting an arbitrary threshold in the proportion of responses falling into a specific category. A threshold level of $\geq 20\%$ was chosen for questions 9, 10, 12, 13 and 14, and a threshold level of $\geq 10\%$ was chosen for question 11.

Survey

Standard introductory text:

The International Association for Bear Research and Management (IBA) advances the conservation and restoration of the world's bears through science-based research, management, and education. Primarily, we 1) provide forums for scientific exchange (conferences, *Ursus*, and *International Bear News*); 2) support professional development at all career levels (student forum, grants for Experience and Exchange and conference travel); 3) provide \approx \$70,000 annually in Research and Conservation grants; and 4) aid governments and NGOs, when asked, with scientific input on issues regarding bears.

As an IBA member you are part of a diverse community of researchers, managers, and educators. We are asking for your help in assessing how IBA is doing and how IBA might best move forward in the next ten years. We need your collective wisdom and creativity to brainstorm and plan strategically for how IBA can best support you and the profession in these changing times.

We ask you to please answer this short (approx. 10-20 minutes) survey below. You need not answer all the questions, though we very much hope you will. After taking the survey, if you have any additional thoughts to share, please feel free to contact Karen Noyce (president) at karen.v.noyce@gmail.com or Andreas Zedrosser (vice-president Eurasia) at andreas.zedrosser@hit.no. We ask you to submit your answers no later than September 1, 2015.

The direct link to the survey may not work on some government computers. If so, please copy and paste the link in your web browsers command line.

Thank you for your help! Your opinion is important to us!

Link to the survey: https://www.surveymonkey.com/r/IBA_Membership_Survey_Strategic_Planning_2015

Questions:

1. What is your age?
2. What is your name (optional)?
3. For how long (in years) have you been member of the IBA?
4. What is your country of residency?
5. What is your country of residency?
6. In what country do you mainly work with bears?
7. Which of the following best describes your current occupation?
 - a. Government agency
 - b. NGO
 - c. Other
 - d. Private consultancy
 - e. Research institute
 - f. University
8. Are bears your primary job responsibility?
 - a. Yes
 - b. No
9. In your opinion, what should be the IBA's 3-5 most important goals for the next 10 years?
10. According to you, what are IBA's greatest strengths or programs?
11. According to you, what are IBA's greatest weaknesses?
12. In your opinion, what are 3 major challenges facing IBA in the next decade?
13. What are 3 major challenges facing bears and their ecosystems in your research area in the next decade?
14. How can IBA be of more direct assistance to you in your work?

Results

General results

The IBA currently has 634 members, of which 18 (3%) are institutional members. Among the remaining 616 members, 77 (12%) are student members.

IBA has members from 70 countries (based on 616 memberships, excluding 4 memberships with unknown nationalities; status of membership on May 27, 2016). Of these members, 60% (N = 372) are from North America (defined as USA and Canada), 21% (N = 129) from Europe (defined as all countries west from the Ural Mountains, including all of Russia), 17% (N = 102) from Asia (all countries east of the Ural Mountains and east of Greece; note that 5 members from Australia and 1 member from South Africa were counted as part of Asia), and 2% (N = 14) from South America (all countries south of the US border) (Figure 1).

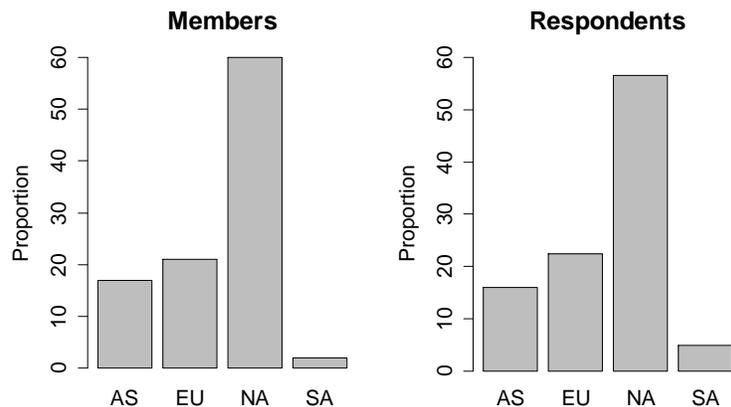


Figure 1: Number of IBA members (Members) and number of responses to IBA strategic survey (Respondents) per continent.

The survey received 125 responses, or a return rate of 20.3% (based on 616 members but excluding 18 institutional members). A country of residency was assigned to 124 responses, of which 16% were from Asia, 22.5% from Europe, 56.5% from North America, and 5 from Asia (Figure 1). Of these responses, 82 (66%) provided answers to the open question 9-14. There was no significant difference in the number of members per continent and the number of responses per continent a respondent lives on (χ^2 -test: $\chi^2 = 12$, $df = 9$, $p = 0.213$). There was also no significant difference between the number of members per continent and the number of responses per continent a respondent works on (χ^2 -test: $\chi^2 = 12$, $df = 9$, $p = 0.213$).

The gender of respondents was 26% women and 64% men (N = 87). The mean age of respondents was 48 ± 13 (SD) years (Table 1, Figure 2). There was no significant difference in the mean age of respondent women and men (mean age women: 45 years, mean age men: 50 years; two-sample t-

test: $t = -1.501$, $df = 37.217$, $p = 0.142$). The mean length of membership was 12 ± 10 years (Table 1).

Table 1: Number (N) of respondents per age class and length of IBA membership.

Age class	N	Length of membership	N
20-30	6	0-5	40
31-40	32	6-10	30
41-50	29	11-15	20
51-60	29	16-20	10
61+	28	21-25	9
		26-30	4
		31+	8

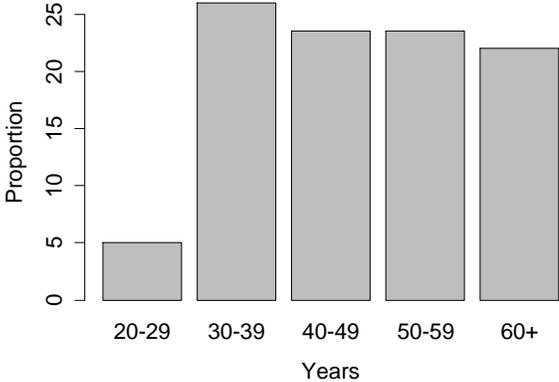


Figure 2: Proportion of respondents per age class (N = 124). Respondents were categorized into the following age classes: 20-29, 30-39, 40-49, 50-59, and 60+ years.

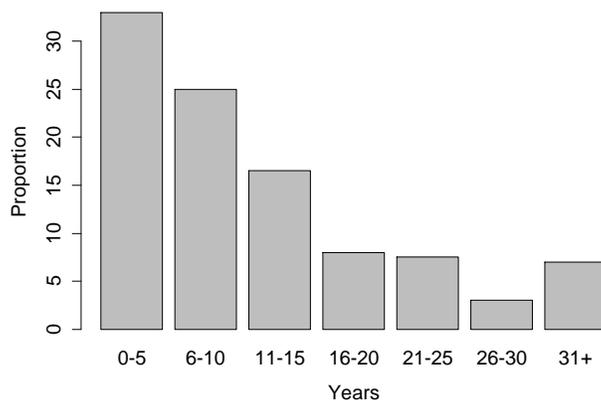


Figure 3: Proportion of respondents per length of membership class (N = 121). Respondents were categorized into the following length of membership classes: 0-5, 6-10, 11-15, 16-20, 21-15, 26-30, and 31+ years.

The occupation of respondents was 26.5% in government agencies, 18.5% in NGO's, 9% in private consultancies, 30 at universities, and 14% in other occupations (retirees, etc.) (N = 124, Figure 4).

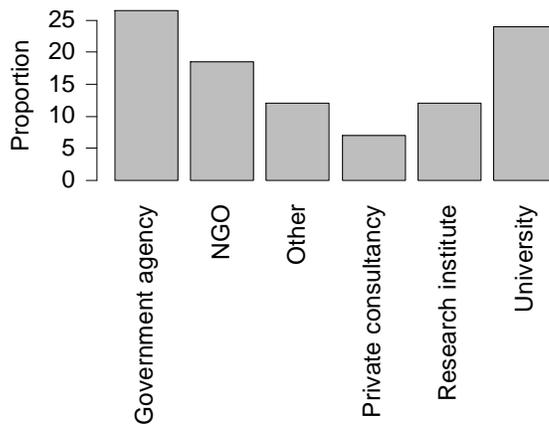


Figure 4: Proportion of occupations of respondents (N=124).

There was a significant difference between the observed number of respondents per continent working in government agencies in comparison to the expected number of respondents per continent (χ^2 -test: $\chi^2 = 9.832$, $df = 3$, $p = 0.020$). Especially more North American respondents worked for government agencies than expected (observed: 85%; expected: 56.5%). There was no

significant difference between the observed number of respondents per continent working at universities in comparison to the expected number of respondents per continent (χ^2 -test: $\chi^2 = 2.545$, $df = 3$, $p = 0.472$). Due to the low sample size no other test were carried out comparing the observed vs the expected occupations among continents.

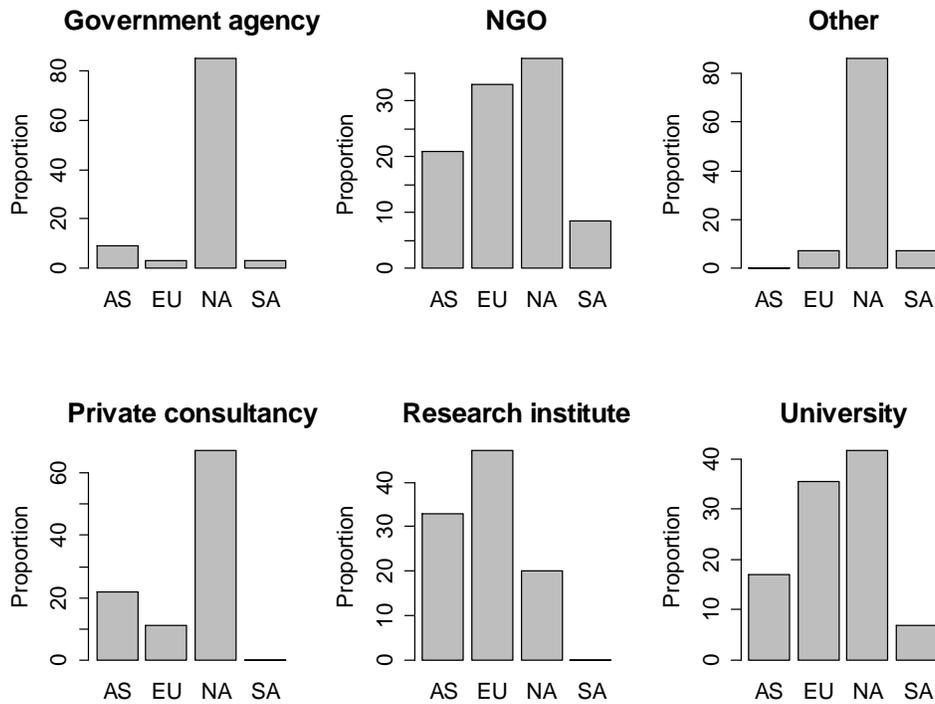


Figure 5: Proportion of respondents working for government agencies (N = 33), in NGO's (N = 24), other occupations (Other; N = 14), private consultancy (N = 9), research institutes (N = 15), or at universities (N = 29) per continent (AS = Asia, EU = Europe, NA = North America, SA = South America).

Table 2: Absolute number and proportions (in parentheses) of occupations of respondents per continent.

	Government agency	NGO	Other	Private consultancy	Research institute	University	N
Asia	3 (15)	5 (25)	0 (0)	2 (10)	5 (25)	5 (25)	20
Europe	1 (3.5)	8 (28.5)	1 (3.5)	1 (3.5)	7 (25)	10 (36)	28
North America	28 (40)	9 (13)	12 (17)	6 (8.5)	3 (4.5)	12 (17)	70
South America	1 (17)	2 (34)	1 (17)	0	0	2 (34)	6

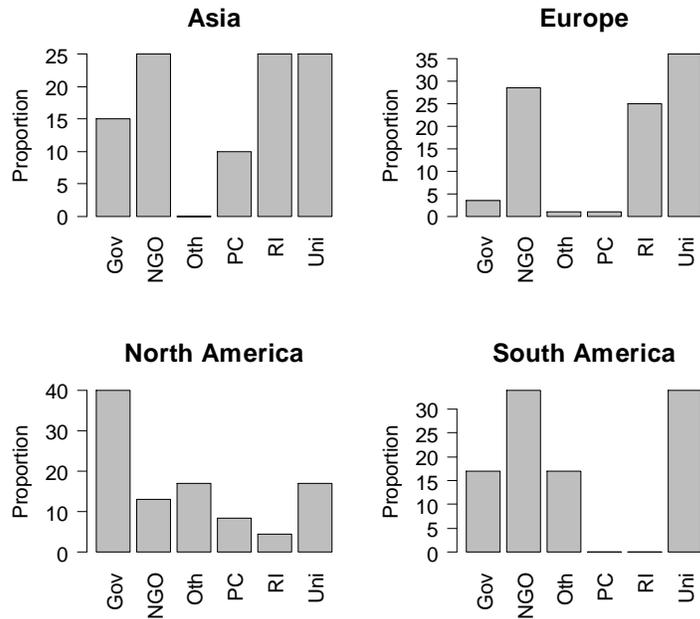


Figure 6: Proportion of occupations of respondents per continent. Gov = Government agency, NGO = NGO, Oth = Other, Pc = Private consultancy, RI = Research institute, Uni = University. Sample size of respondents per continent: Asia = 20, Europe = 28, North America = 70, South America = 6.

Bears are the primary job responsibility of 48% of respondents (N = 125), while bears are not the primary job responsibility of 52% of the respondents. In general, bears are the main responsibility for about half of the respondents per occupancy (Table 3, Figure 7).

Table 3: Absolute number and proportions (in parentheses) of respondents with bears as main responsibility in their job (Yes) and without bears as main responsibility in their job (No) in relation to occupation.

Bears as primary job responsibility	Government agency	NGO	Other	Private consultancy	Research institute	University	N
Yes	17 (52)	11 (46)	6 (43)	3 (33)	9 (60)	14 (47)	60
No	16 (48)	13 (54)	8 (57)	6 (66)	6 (40)	16 (53)	65

Results question 9: In your opinion, what should be the IBA’s 3-5 most important goals for the next 10 years?

The 6 most important goals ($\geq 20\%$ support among respondents) were that IBA should provide more support for conservation oriented research and management projects (46%); IBA should provide more and better information and educational materials for the general public (31%); IBA should take a more proactive and stronger political role (31%); IBA should strive to increase its finances and grants program (24%); IBA should help improve the communication and cooperation amongst the membership (23%); and IBA should strive to increase student recruitment and involvement (Table 4, Figure 7). Below I provide randomly chosen examples of opinions and suggestions for 4 of these categories (Ecology & conservation, Public info, Leadership, Communication intern), to make it more obvious for a reader what kind of comments and what kind of meaning a given category contains.

Table 4: Categorization of goals for IBA according to respondents of the strategic survey (full categorization of goal), abbreviation of goals (goal), as well as number and proportion of respondents for each category. Overall number of responses to question 9: 113.

Full categorization of goal	Goal	Number	Proportion
Ecological, management and conservation goals	Ecology & conservation	52	46
Public outreach/information/education	Public info	35	31
Improve political role and relevance of IBA	Leadership	35	31
Increase funding/grants/travel grants programs	Finances/grants	27	24
Improve communication/cooperation amongst membership, researchers, and managers	Communication intern	26	23
Increase student/young member involvement	Student involvement	25	22
Continue/improve Ursus & IBN	Ursus & IBN	21	19
Improvement of internet services	Internet service	15	13
Continue/improve conferences	Conferences	15	13
Support capacity building and professional development	Capacity building	13	12
Illegal trade of bear parts/poaching/bear farming	Illegal trade	10	9
Human bear conflicts	HBC	10	9
Increase membership	Membership increase	9	8
Improvement of vision and organizational structure of IBA	Organization structure	7	6
Increase cooperation with other science groups	Cooperation extern	6	5
Relationship with BSG	BSG	4	4
Data/publication sharing platform	Platform	3	3
Animal/bear welfare	Animal welfare	3	3

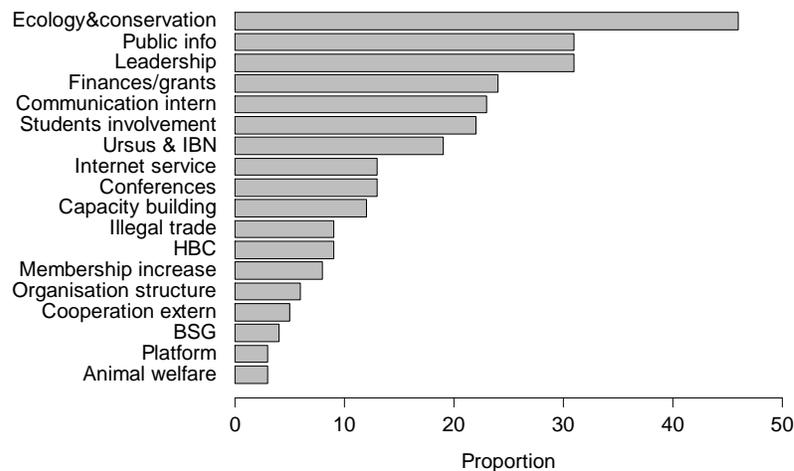


Figure 7: Proportional categorization of main goals listed by respondents as the most important for IBA for the next 10 years. Overall number of responses to question 9: 113.

Ecological, management and conservation goals - examples

Example 1: This might be vague, but the IBA should tackle the challenging issues of the present and expected future in the research and conservation of bears around the globe: evermore human expansion and increasing conflicts with nature and bears, co-existence with bears (e.g. see some parts of Europe), climate change, public outreach (make the latest knowledge known to the people or at least support projects in doing so).

Example 2: Research - is badly needed for bears world-wide. Conservation - all extant bear populations.

Example 3: Support projects that will contribute to the conservation of bear species around the world.

Example 4: Bear conservation world wide. Research and investigate bear biology, ecology, behavior.

Example 5: To develop the existing and to create the new methods of bears accounting.

Example 6: Continue to support research and conservation of threatened bear populations, leading to stabilized populations and heightened awareness of threats facing bears.

Public outreach/information/education - examples

Example 1: Educate the public about the need to conserve at-risk species, including clearly communicating the top threats to those species.

Example 2: Taking the science to the public. Plot the plight and conservation status of the world's bears annually.

Example 3: Continued conservation message, but incorporate more from an attractant management standpoint. We can have the best science but it means nothing if we cannot get the people side of the equation to support and cooperate with growing and or expanding bear populations.

Example 4: Promotion of knowledge and conservation efforts.

Example 5: I believe the IBA should continue to work on converting the general public's interest in bears into support for conservation of bears that is based on sound science.

Improve political role and/or relevance of IBA – examples

Example 1: Maintain high visibility of IBA

Example 2: Continuing to be a voice for conservation of bears worldwide

Example 3: 2. Improving the standing of IBA as a group of subject matter experts that can be tapped to provide science-based guidance to aid policy decision-makers. I belong to other groups (e.g., IUCN-PBSG) that serve this function and it's unclear to me if IBA plays a similar role- aside from the BSG. If IBA does play a similar role, then it needs to be better communicated.

Example 4: To consolidate our position as a science-based organization not only within the scientific community, but at governments and public levels.

Example 5: get involved in giving opinions (publicly, in media) about the management decisions and actions by individual governments.

Example 6: Providing policy and position statements to press, NGOs, and governments.

Improve communication/cooperation amongst membership, researchers, and managers – examples

Example 1: Connect bear people.

Example 2: 1. Strengthen international cooperation of scientists, conservationists and practical implementers.

Example 3: Create an easier communication platform where people interested or working with bears can communicate with each other.

Example 4: Provide a better forum for exchange of ideas.

Example 5: Strengthen the links between developed and underdeveloped countries.

Results question 10: According to you, what are IBA’s greatest strengths or programs?

The 6 most important strengths of IBA ($\geq 20\%$ support among respondents) as listed by the respondents were the conferences (40%); the grants program (36%); Ursus and IBN (36%); IBA’s scientific expertise (26%); IBA’s organizational culture (25%); and IBA role in providing a networking (25%) (Table 5, Figure 8). Below I provide randomly chosen examples of opinions and suggestions for 2 of these categories (Organizational culture, Networking), to make it more obvious for a reader what kind of comments and what kind of meaning these categories contain.

Table 5: Categorization of the main strengths of IBA according to respondents of the strategic survey, as well as number and proportion of respondents in each category. Overall number of responses to question 10: 93.

Categories	Number	Proportion
Conferences	42	40
Grants program	38	36
Ursus & IBN	38	36
Scientific expertise	28	26
Organizational culture	27	25
Networking	26	25
Internationalization	17	16
Student support	14	13
Relationship with BSG	5	5

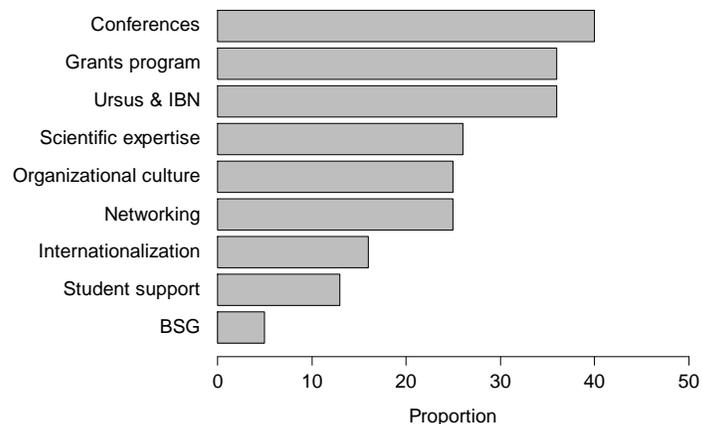


Figure 8: Proportional categorization of main strengths of IBA as listed by respondents. Overall number of responses to question 10: 93.

Organizational culture – examples

Example 1: 1. Dedicated membership who work towards bear conservation, collaboratively. (Members help one another rather than compete to be “Ms/Mr Bear”, as can happen with other professional organizations.)

Example 2: The greatest strength of IBA is its very intellectual Bear Scientists who are very approachable and communicable. The other great strength is the IBA Conferences which are very informative and regular. The IBA gatherings and sharing of research is a great bond between the bear scientists of the world, its like a family.

Example 3: The network of the people round the globe and the journal Ursus is best strength what IBA possess and its properly utilization (to some extent) is also being harvested.

Example 4: The international scope of the organization and the dedication of the members. No other group that I am a member of is as tightly knit and dedicated to the species they work with.

Example 5: The membership, and networking, is the greatest strength.

Networking – examples

Example 1: I believe the IBA's greatest strength is in its role as a network of scientists and scientifically-based managers, providing avenues for the exchange of evidence-based knowledge and experience. Its strength is in what it is: a professional scientific society.

Example 2: An amazing network of bear professionals from NGOs to government and private companies.

Example 3: Exchange of knowledge and experience.

Example 4: Networking of bear professionals and enthusiasts.

Example 5: The membership, and networking, is the greatest strength.

Results question 11: According to you, what are IBA's greatest weaknesses?

The 7 most important weaknesses of IBA ($\geq 10\%$ support among respondents) as listed by the respondents was the lack of leadership (16%); suggestions for the improvement of the conferences (15%); IBA's structure and member involvement (14%); the financial situation of the IIBA's and its grant programs (12%); internet presence and presentation (12%); the lack of public information, education and outreach by IBA (12); the loss of management focus and the interaction between research and management (11%) (Table 6, Figure 8). Below I provide randomly chosen examples of opinions and suggestions for some of these 7 categories, to make it more obvious for a reader what kind of comments and what kind of meaning these categories contain.

Table 6: Categorization of the main weaknesses of IBA according to respondents of the strategic survey, as well as number and proportion of respondents in each category. Overall number of responses to question 11: 95.

Full categorization of weaknesses	Weakness	Number	Proportion
Lack of advocacy/support for governments/officials	Leadership	15	16
Conference improvement	Conference	14	15
IBA structure, functioning, and membership involvement	Structure	13	14
Funding of operation costs, grant programs, and conference	Finances	11	12
Web presentation/presence/information & social media	Internet	11	12
Lack of public information and outreach	Public info	11	12
Loss of management focus, interaction research & management	Loss manage focus	10	11
Student recruitment and support	Students	9	9
Improvement networking opportunities and communication among members	Communication internal	9	9
Lack of members	Members	9	9
Too North America (and Europe) based and focused	Too NA oriented	8	8
Ursus, weaknesses related to	Ursus	7	7
Poor name/brand recognition, low public profile	Public profile	7	7
No weaknesses	No weaknesses	6	6
Cooperation with zoo professionals and other professional groups	Cooperation	4	4
Too narrow focus, lack of interdisciplinary	Too narrow	2	2
Unclear relationship with BSG	BSG	1	1
Acceptance of killing-based management	Animal welfare	1	1
Too agency oriented	Too agency oriented	1	1
Not for bears, but social network	Too much social network	1	1
Lack of working groups	Lack of working groups	1	1
Improve regional cooperation	Regional cooperation	1	1
Be more inclusive to non-academic members	More inclusive	1	1
Lack of professionals	Lack of professionals	1	1

More protection of wildlife	Lack of protection orientation	1	1
Countries without bear management plans	Lack management	1	1
Lack of long-term program in countries	Lack of longterm programs	1	1

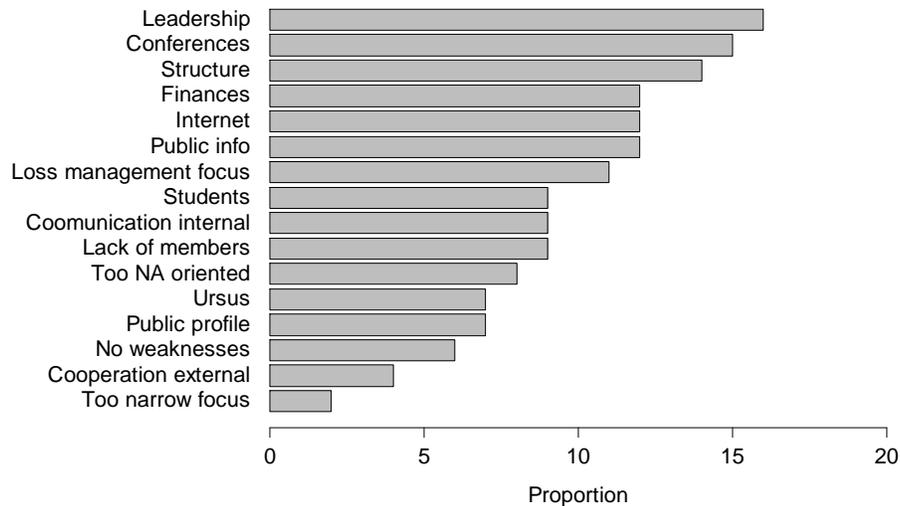


Figure 8: Proportional categorization of main weaknesses of IBA as listed by respondents. Note that only categories with a proportion of responses > 1 are presented in the figure. Overall number of responses to question 11: 95.

Lack of advocacy/support for governments/officials - examples

Example 1: A little on the timid side when it comes to taking an advocacy position for protecting large wild landscapes upon which evolutionary biology depends.

Example 2: We need stronger and improved ties with management and government leaders.

Example 3: I would say there is a lack of presence in non research and non hands-on resource management audiences - thinking of environmental professionals dealing with bears from a development, environmental assessment standpoint. I would like to see the IBA work at establishing environmental assessment guidelines for bears, or working groups on that topic, for some of the major development sectors (mining, oil and gas, transportation corridors etc....).

Example 4: Recent advancements in communications with bear experts and managers in third world countries has been admirable. I believe we should continue to focus on these efforts, and work to become effective (sought after) counselors of bear ecology and management in these countries - this involves greater activity within the cultural and political arenas.

Example 5: Try to become more relevant in political and social circles where many of the relevant decisions are made.

Conference improvement – examples:

Example 1: Is mainly researchers from developing countries can not participate or have not enough participation on IBA meetings and other activities due to finance.

Example 2: So far, I have the impression that a conference/workshop proceedings document is not produced. This would be very helpful, both as a release point for ongoing research and information, and as a directory that enables participants to keep in contact.

Example 3: Too agency-oriented and too few meetings. It would be good to have more meetings in the US that are affordable to attend.

Example 4: One suggestion for improvement: I would like to see more frequent human-bear conflict workshops; I know there is a human-bear conflict group but I don't hear much about what they do.

Example 5: Clear lack of opportunities for early career professionals - IBA conferences are amazing, but very rarely help land even a part-time/seasonal job opportunity. Some people lack stats background, other field experience. It would be great to maximize opportunities on these fronts.

IBA structure, functioning, and membership involvement – examples:

Example 1: 1. From an operational and governance standpoint: a. Timely follow-through on important tasks and plans is difficult with an all-volunteer Council, committees, etc. Maintaining active engagement of volunteers, council, and committee members is a continual challenge.

Example 2: Few opportunities for incorporating creative new ideas related to conservation of bears. As an organization that is led by very experienced people, later in their careers, IBA tends to make 'wise' decisions. However, it is less than agile and does not have a structure that promotes involvement by young scientists. Thus, we may be missing out on some very good ideas and potentially actions that may be useful particularly where we have bears that are most threatened (e.g., impoverished countries).

Example 3: It's unclear how members can get more involved with IBA, short of running for offices. Surely there are working groups and committees that interested people could participate in? If so, how do they find out about those opportunities? As a relative newcomer to IBA, it seems fairly insular.

Loss of management focus, interaction research & management – examples:

Example 1: Interactions between research and management can be improved. Making research work to improve bear management is important. Establish some goals for research to meet management needs (bear/human conflicts) and monitoring and report the success. There are good examples taking place every year of needs in this area.

Example 2: Somehow become more relevant to working managers, I realize this is being attempted.

Example 3: Research doesn't equate to conservation or protection.

Results question 12: In your opinion, what are 3 major challenges facing IBA in the next decade?

The 4 major ($\geq 20\%$ support among respondents) challenges facing IBA in the next decade as listed by the respondents was IBA’s financial situation (39%); ecological, conservation and management challenges (34%); IBA’s role in terms of proactive leadership and authority in the conservation and management of bears (24%); an increase in membership (20%) (Table 7, Figure 9). Below I provide randomly chosen examples of opinions and suggestions for some of these 4 categories, to make it more obvious for a reader what kind of comments and what kind of meaning these categories contain.

Table 7: Categorization of the main challenges for IBA according to respondents of the strategic survey, as well as number and proportion of respondents in each category. Overall number of responses to question 12: 93.

Category	Abbreviation	Number	Proportion
Financial situation	Finances	36	39
Ecological, conservation and management challenges	Ecology	32	34
Pro-activity, authority and leadership	Leadership	22	24
Increasing the number of members	Increase membership	19	20
Public outreach and information	Public information	11	12
Maintain relevance to members	Relevance for members	10	11
Ursus, development of	Ursus	9	10
Website, social media & communication with membership	Internet presence	9	10
Generational change	Generational change	7	8
Internationalization	Internationalization	6	6
Volunteer structure of IBA	Volunteer structure	5	5
Conferences, costs & quality	Conferences	5	5
Membership involvement	Member involvement	4	4
Quality of research	Research quality	4	4
Maintain good practices & keep activity high	Stagnation	3	3
Student support	Student support	3	3
Animal rights and welfare	Animal welfare	3	3
Illegal trade in bear parts	Illegal trade	2	2
Industry involvement	Industry involvement	1	1
Political situations (military actions)	Political situations	1	1

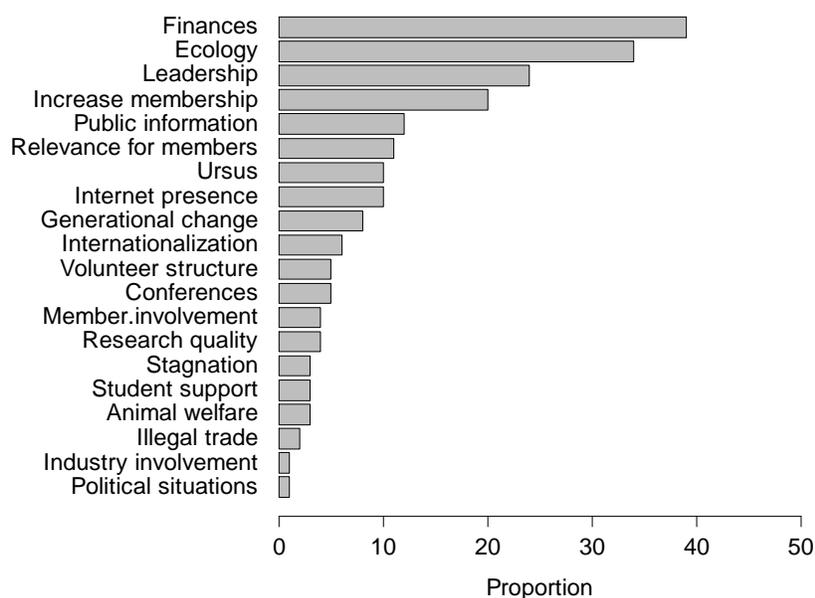


Figure 9: Proportional categorization of main challenges for IBA as listed by respondents. Overall number of responses to question 12: 93.

Financial situation – examples

Example 1: Ensuring sufficient funding for bear research.

Example 2: Maintaining public support (financial) for bear conservation.

Example 3: Funding for and volunteer commitment to maintaining the organization

Ecological, conservation and management challenges - examples

Example 1: Adopting an ecosystem approach.

Example 2: Climate change, fire ecology, loss of habitat.

Example 3: Responding to the extinction crisis. What might the IBA official stance on items such as palm oil, food distribution, etc. that affect bears and their habitats?

Pro-activity, authority and leadership – examples

Example 1: Becoming more widely recognized as the “voice for bears”, as in conservation, science-based response to climate issues, environmental degradation, appropriate and inappropriate management approaches, etc.

Example 2: The intersection of politics and science. Using climate change as an example, politicians easily deny science that isn't convenient for their personal goals.

Example 3: We need science to actually be translated into policy and management actions, including the enforcement of these, and measuring successes of our activities (e.g. measuring bear education program successes...).

I seem to find a lot of great articles making suggestions on what should be used in policy/management decisions/actions but not case examples of what was actually implemented, measuring the success of implementation, adapting and modifying the management action, etc.

Increasing the number of members - examples

Example 1: Keeping up membership.

Example 2: Membership reduction due to retirement of senior researchers/managers - a membership level that accommodates this group may keep their expertise 'in the loop' of communications with in the association.

Example 3: Increasing membership (this is affecting all scientific societies I think).

Results question 13: What are 3 major challenges facing bears and their ecosystems in your research area in the next decade?

The 4 major ($\geq 20\%$ support among respondents) challenges facing bears and their ecosystems in the next decade as listed by the respondents was habitat degradation (73%); human bear conflicts (49%); climate change (31%); illegal trade in bear parts and poaching (29%) (Table 8, Figure 10). Note that especially the categories habitat degradation and climate change are not independent from each other, which has also been pointed out by several respondents. Below I provide randomly chosen examples of opinions and suggestions for some of these 4 categories, to make it more obvious for a reader what kind of comments and what kind of meaning these categories contain.

Table 8: Categorization of the main challenges for bears according to respondents of the strategic survey, as well as number and proportion of respondents in each category. Overall number of responses to question 13: 108.

Categories	Abbreviations	Number	Proportion
Habitat degradation	Habitat	79	73
Human bear conflicts	HBC	53	49
Climate change	Climate change	34	31
Illegal trade/poaching	Illegal trade	31	29
Lack of public information	Public information	21	19
Lack of political support	Political support	14	13
Population management	Management	11	10
Human population growth	Human population growth	10	9
Lack of knowledge	Knowledge	7	6
Lack of funding	Funding	3	3
Diseases and invasive species	Diseases	2	2
Captive bears	Captive bears	1	1
Measuring success of management	Measuring success	1	1
Emotional environmental groups	Environmental groups	1	1

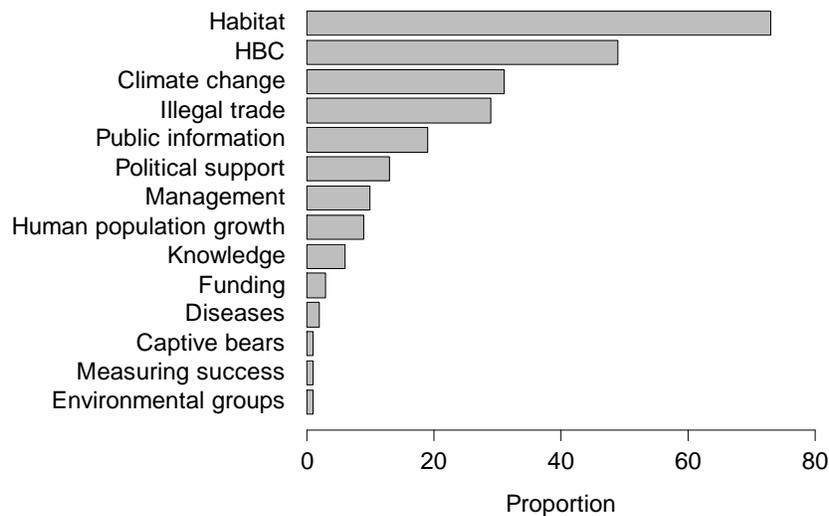


Figure 10: Proportional categorization of main challenges for bears as listed by respondents. Overall number of responses to question 13: 108.

Habitat degradation – examples

Example 1: Habitat loss! This is a problem just about everywhere. Of particular concern is habitat loss in developing countries, due to expansion of agriculture and human harvest of timber products, legally and illegally.

Example 2: Habitat loss and genetic isolation...allopatric conditions

Example 3: 1. Habitat loss and fragmentation because the expansion and change in distribution of human activities (most related with population growth and climate change).

Human bear conflicts - examples

Example 1: How we should deal with the increasing human-bear conflicts under the condition of declining human population and social vitality. It will be necessary to include philosophical and/or cultural lore on bear conservation in each region.

Example 2: Increased human bear conflict.

Example 3: Bear-human conflict management.

Climate change – examples

Example 1: Also, climate change is simply the elephant in the room, especially for polar bears - management efforts that do not include climate change will be fruitless.

Example 2: Time shift of food availability due to climate change.

Example 3: Climate change and the resulting human development is likely to sever connections between bear populations unless action is taken to protect them. This may isolate some small populations and ultimately lead to

populations that are not large enough to persist long term. Climate change is also likely to change food resources and it is unknown how this will influence bear health and abundance.

Illegal trade in bear parts – examples

Example 1: Trade in bears and bear parts.

Example 2: Poaching and illegal trade often related to Traditional Chinese Medicine.

Example 3: Poaching trade.

Results question 14: How can IBA be of more direct assistance to you in your work?

The 3 major ($\geq 20\%$ support among respondents) ways IBA can be of more assistance to respondents were financial support (30%); improve the internal communication among members (27%); IBA to become a more pro-activity authority and leader on bear-related topics (20%) (Table 9, Figure 11). Below I provide randomly chosen examples of opinions and suggestions for some of these 4 categories, to make it more obvious for a reader what kind of comments and what kind of meaning these categories contain.

Table 9: Categorization of how IBA can be of assistance to respondents of the strategic survey, as well as number and proportion of respondents in each category. Overall number of responses to question 14: 82.

Category	Abbreviation	Number	Proportion
Financial support	Financial	25	30
Internal communication/cooperation	Communication	22	27
Pro-activity, authority and leadership	Leadership	16	20
Technical support	Technical support	12	15
Conferences	Conferences	8	10
Capacity building	Capacity building	8	10
Working groups	Working groups	7	9
Public information	Public information	6	7
Internet presence	Internet presence	4	5
Endorsement of bear-related business	Endorsement	1	1
Conflict mediation	Mediation	1	1
Increase membership	Membership	1	1
Regional coordinators	Regional coordinators	1	1
Cooperation with other groups	Cooperation	1	1

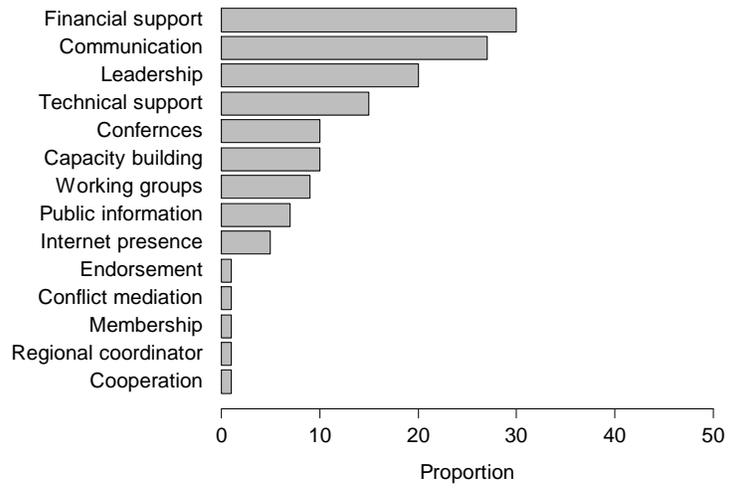


Figure 11: Proportional categorization of how IBA can be of assistance to respondents of the strategic survey. Overall number of responses to question 13: 82.

Summary of the main content of the 5 most often mentioned categories in questions 9-14.

The categories “Finances” and “Proactive authority and leadership” were mentioned 5 and 4 times, respectively, among the most important categories per question. The categories “Public information”, “Conference”, and “Internal communication” were mentioned two times among the most important categories for questions 9-14. Below is an oral summary of the main content of these categories (based on the wording of the responses) for each of the open questions 9-14. The main content of the majority of the responses is summarized for each category per question. In addition, I have also tried to point out responses that contained somewhat differing opinions or interesting thoughts.

Note that in this section I have not evaluated categories with responses dealing with ecological issues or problems, and that I have not further evaluated question 13 – The main challenges for bears in the future, because these are things that IBA can only deal with effectively if we manage/handle the topics pointed out by respondents in the other questions.

Category “Finances/grants”

Question 9 (Q9 - Future goals of the IBA): The main content can be summarized with these words: “Continue and expand the grant system”. One critical voice suggested to invest more into more novel studies (i.e., barcoding, genome sequencing).

Q10 – (Strengths of IBA): Generally, respondents thought that IBA’s grants program was one of its absolute main strengths. A good summary is the following statement: “Well I think all IBA activities and support very important but Research & Conservation Grants is the most necessary.” No critical voices, just unanimous support for the grants program in Q10!

Q11 – (Weaknesses of IBA): Respondents are realistic and understand that IBA is financially limited, and rightfully point out that securing and increasing the financial situation of IBA, especially of the grants program, is a major weakness of IBA. “More money” and “Currently, IBA operates on the edge of solvency” sum up the responses nicely. One critical voice suggested that “Limited research grants coupled w/ disparate species and application uses may be a problem”.

Q12 – (Future challenges for IBA): Again, respondents rightfully point towards the fact that an improvement of IBA’s financial situation will be a major challenge in the next 10 years. “Money is tight and we are struggling to keep Ursus solvent and our grant program is pretty meager”. One respondent points towards the large number of non-IBA members at conferences as a source of increasing membership and thereby finances. One response also pointed out the fact that “Fiscal viability (is) challenged by (IBA’s) small taxonomic focus”.

Q14 – (How can IBA be of assistance for you): In general, respondents struggle with finding funding for research as well as for conference attendance. “Financial support is always a limiting factor, so of course more opportunities for funding are welcome.” Respondents generally

understand and are okay with the fact that most grant and travel support goes to “developing” countries, but one critical response pointed out that “IBA grants are mostly for international work. I don't even consider IBA as a funding source for my work. I understand that the greatest need is internationally (see above), but it doesn't have to be at the exclusion of projects in the US (that may or may not be true but that is my perception)“.

Category “Proactive authority and leadership” (i.e., improve political role and relevance of IBA)

Q9 – (Future goals of the IBA): Generally speaking, respondents want IBA to be more visible and more active with helping governments, agencies, etc. with scientific questions pertaining bears and their management. The term “advocacy” was mentioned in 2 responses, “lobbying” in 1 response. This is not specific to Q9, but rather true for responses in this category for all open answer questions, but “the Wildlife Society” has been mentioned as good example on how to be a proactive and recognized authority in this field.

Q10 – (Strengths of IBA): This category was not mentioned a single time in this question!

Q11 – (Weaknesses of IBA): Respondents point out that IBA is not very visible and active in terms of affecting policies or supporting/aiding governments/agencies/conservation efforts. The term “advocacy” was mentioned 3 times in responses to Q11. Some summarizing responses are: “IBA's capacity to advise and assist governments, agencies, and NGOs is underutilized. I would like to see more proactive engagement at this level.” “A little on the timid side when it comes to taking an advocacy position for protecting large wild landscapes upon which evolutionary biology depends.” “Try to become more relevant in political and social circles where many of the relevant decisions are made.” “It's not clear to me what stature/clout IBA has- even the BSG. Perhaps it does have clout in affecting science-based policy decisions but the at-large membership is unaware? As a member of TWS, I can say that they do a pretty good job of communicating with their members about the ability of TWS to influence policy. I realize TWS has considerably more resources to pull from, but perhaps there is a cost-effective way for IBA to be more communicative with its members?”

Q12 – (Future challenges for IBA): A wide variety of opinions and suggestions was summarized into this category, but all of them either point directly or can be interpreted as pointing towards stronger and more active involvement of IBA into politics and societal developments negatively affecting bears and the ecosystems they live in. Maybe a good summary response would be “Staying relevant and effective.” Three responses (from North America) point also towards the increase of political pressure against science as a challenge; for example: “I'm concerned about the growing lack of support for science-driven decisions in North America. It seems that evidence-based decision-making is losing the PR battle with emotion-driven or opinion-based story telling. How can the IBA help convince the public that science ought to play a key role in decisions about bear conservation? I'm concerned that declining public support for traditional methods of research and management of bears in North America (e.g., less support for hunters, less support for removal of bears in conflict situations) without effective alternatives being

proposed will leave North American bear managers with fewer effective tools. Just as importantly, I'm concerned that it will leave them without adequate funds to support research. Will the IBA soon face increasing requests for research funds from North America?"

Q14 – (How can IBA be of assistance for you): Again, a wide variety of suggestions were summarized into this category, but in general, respondents suggest that a more visible and active IBA playing a larger political role would assist them (and bears, conservation issues) in their work. Again, “The Wildlife Society” was mentioned as a good example several times. The term “Position statements” was mentioned 3 times, “advocacy” once and “lobbying” once. One respondent pointed out: “Developing white papers, or position statements, on major issues such as climate change, human-bear conflict, etc. might assist many bear managers in their jobs because there would be the clout of a respected international group behind the position statements”. Some respondents provided more concrete suggestions, such as “Recommend that each state allow more participation in bear management policies by concerned groups of citizens.”, or “Help us overcome the restriction of polar bear imports into the USA.”. One respondent also felt that IBA should be more responsive to specific requests: “Be responsive. IBA can assist us at a level above my own agency standing. In the past, I asked IBA to ask the USFWS to consider waiving the CITES requirement that permits be obtained for exporting hair samples for DNA analysis (we have to ship across an international boundary). I have not seen any action on this request. This is not a major issue but it is a case where IBA could have been of great assistance to me and a lot of other bear researchers. I am a little disappointed in their response.”

Category “Conferences”:

Q10 – (Strengths of IBA): The positive feedback about IBA conferences was overwhelming. It feels fair to say that people “simply love” IBA conferences, mainly due to the fact that people are (generally) genuinely nice with each other, people are welcoming and including to newcomers, and above all, conferences are a superior networking and information exchange opportunities. For example: “The other great strength is the IBA Conferences which are very informative and regular. The IBA gatherings and sharing of research is a great bond between the bear scientists of the world, it’s like a family.”

Q11 – (Weaknesses of IBA): It strikes as a bit contradicting that IBA conferences are viewed as one of our major strengths, but at the same time also as a main weakness. Some of the comments in this category have to be viewed as suggestions for improvement (“more meetings”, “simultaneous translation”, “no conference proceedings”). Other ideas mentioned to improve the conferences were “workshops” or “job boards”. The weakness mentioned most often (6 times) in connection with IBA conferences are the associated travel and attendance costs. It may be that the criteria for the distribution of travel grants may cause irritation sometimes: “When a meeting, workshops and conference is organized there shouldn't be any political influence for grants. Apart from IBA travel grant there should be added more sponsor. Only Students who dedicating life for bear research and who can't efforts for travel expenses should be given priority for bursary. Not

whoever works on other species and write up an abstract or doesn't matter he is a council members or core personal.”

Category “Improve communication/cooperation amongst membership, researchers, and managers”:

Q9 – (Future goals of the IBA): A variety of suggestions for future goals of the IBA have been summarized in this category. The common link between these suggestions is that respondents would like to see IBA as a communication and/or cooperation mediator within the “bear community”. Generally, two main thoughts are communicated by the respondents: communication and cooperation between researchers and managers should be developed (e.g.: “Increase connections between bear scientists, educators and managers worldwide, both through provision of traditional forums and also through emerging media, building a stronger, more unified global community of bear advocates ”); and the communication/cooperation between countries, often especially between “developed” and “undeveloped” countries should be improved: “Cooperations between developed and developing countries”. Maybe the best way to summarize this responses to this category would be: “Connect bear people “.

Q14 – (How can IBA be of assistance for you): A response that nicely summarizes how IBA could be of more direct assistance to its members: “Communication, communication, communication. Provide ways to find out what colleagues are learning, communicate with them, info on what works and what doesn't, the recent bear literature in IBN is excellent, etc.”. Four responses have suggested to help improve communication by providing contact information and areas of expertise/research, for example: “Access to a directory list (with contact info) of people with expertise in the areas I need help - this information was gathered with membership forms for years”. Online forums have also been suggested to improve communication amongst members: “Provide an online forum similar to Truman (but not a listserv) where people can see previous subject threads, learn about colleagues (with links to their ResearchGate profiles), hear informal updates on new techniques or observations, provide mentors, etc. (Thank you for providing a Facebook presence)”.

Category “Public information and education”:

Q9 – (Future goals of the IBA): This short comment sums up what quite many respondents feel should be a major goal of IBA in the next 10 years: “Taking the science to the public”!

Q11 – (Weaknesses of IBA): Many respondents feel that we need to improve our outreach to the public, to educate the general public on bears and their conservation needs, and translate the science for a wider audience. A comment to summarize the general content of this category would be: “The IBA needs to learn how to communicate with the general public - to get it's valuable information out where it can be readily accessed and understood. The fate of bears worldwide depends on how much the public knows and cares about them.” Three respondents point to the social media and the internet presence of the IBA as a way of reaching the public.

Respondents generally suggest that IBA is not very visible in the general public, but maybe also not amongst professionals; for example: “Lack of public awareness. As a professional wildlife biologist for over 30 years with state and federal agencies, IBA has not been on my radar.”