

Science, Politics, Doubt and Hope: the Future of Limnology in Canada

Peter R. Leavitt
Alain Patoine

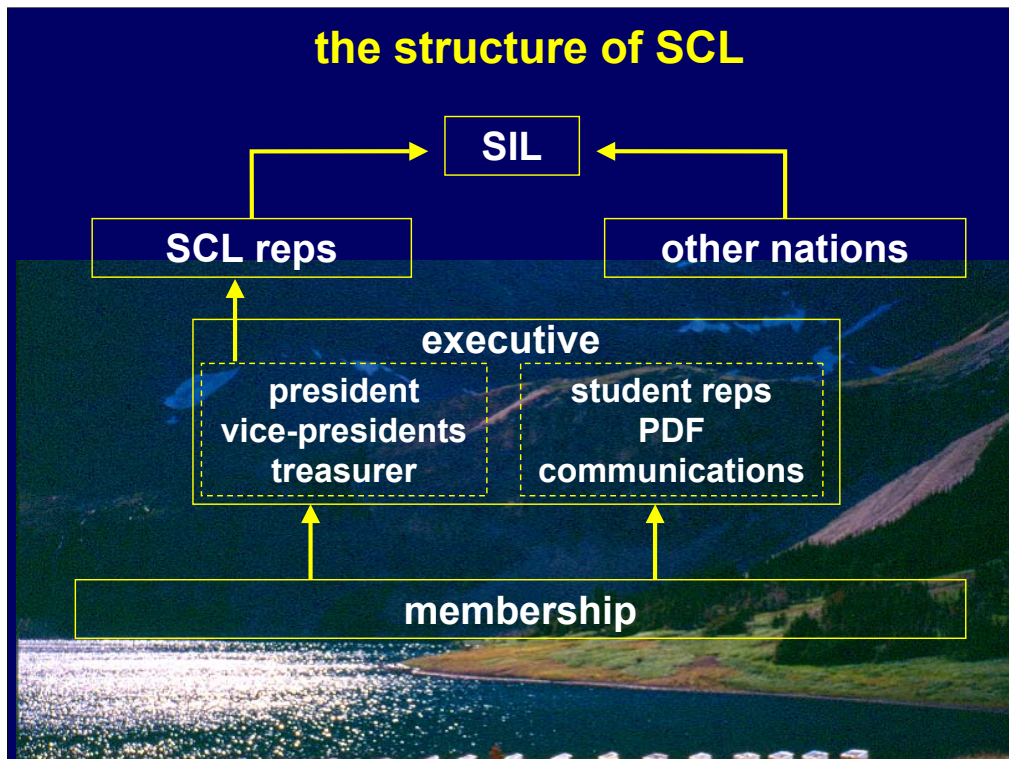
Limnology Laboratory
University of Regina

This file contains the presentation made to the membership Jan 2005 by Society of Canadian Limnologists (SCL) President Peter Leavitt. The presentation summarized the results of the Fall 2005 membership survey conducted by the SCL Executive.

**Society of Canadian Limnologists
(SCL)
Société Canadienne de Limnologie**

- **founded after 1971 meeting of Societas Internationalae Limnologiae (SIL) in Winnipeg by Frank Rigler (McGill), David Schindler (DFO), et al.**
- **represent Canadian freshwater science in international forum via co-sponsored meetings.**
- **official representative of Canada to International Society for Theoretical and Applied Limnology (SIL).**
- **meet annually with Canadian Conference for Fisheries Research (CCFFR).**

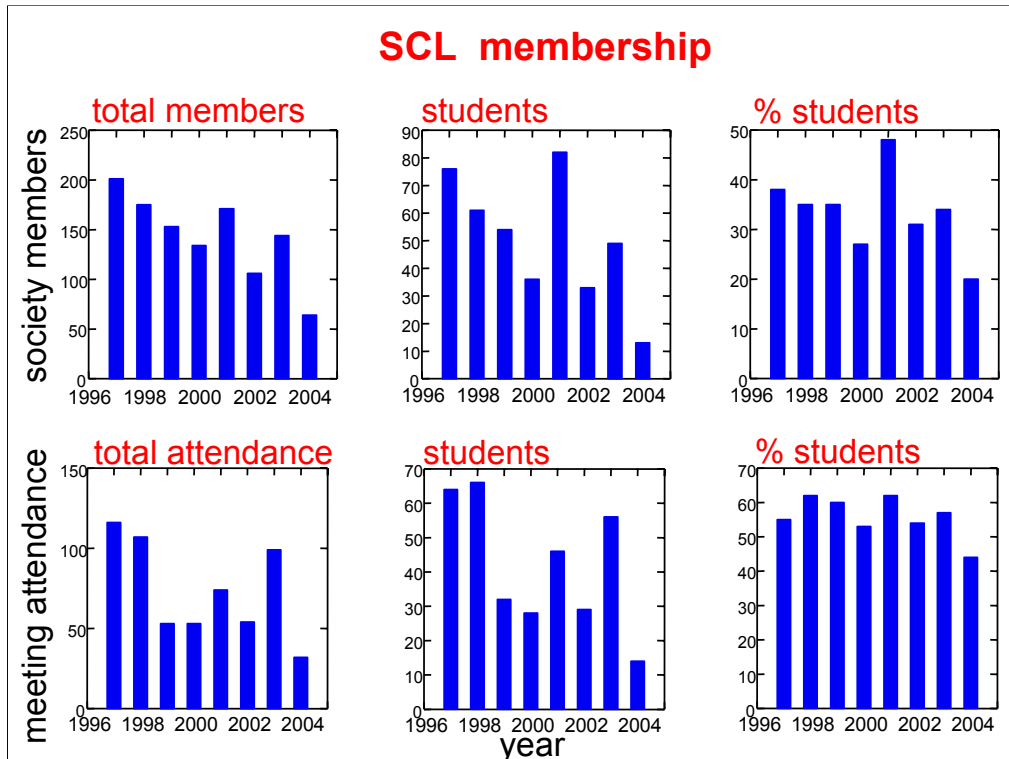
SCL arose over nearly a decade following the SIL meeting in Winnipeg. The Society officially came into existence in the early 1980s, with the first official meeting in Ottawa in 1981. At present, SCL functions as the Canadian national representative to SIL and acts to promote aquatic sciences within Canada and overseas.



SCL has a simple structure in which the Executive is drawn from the general membership. Some executive members (president, two vice-presidents, treasurer) are also official national representatives to SIL. Other members of the executive include two student representatives, a post-doctoral representative, and communications officer. At present, the membership includes Peter Leavitt (President, U. Regina), Helene Cyr (VP-Francophone, U. Toronto), Shelley Arnott (VP-Anglophone, Queen's U.), Rolf Vinebrooke (treasurer, U. Alberta), Jerome Marty (student rep, UQAM), Alison Derry (student rep, Queen's U.), Alain Patoine (post-doc rep, U. Regina) and Pedro Peres-Neto (communications, U. Regina).

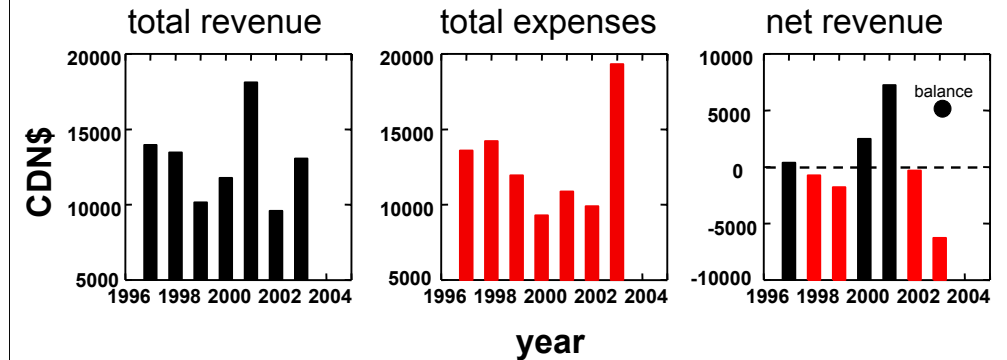


SCL provides a wide variety of services to its members. In addition to the annual conference presently held in January with Canadian Conference for Fisheries Research (CCFFR), SCL provides travel funding for graduate students (SCL, DIALOG), maintains the Society website, offers subscriptions or discounts to premier aquatic science journals, and facilitates communications among it's membership and other aquatic scientists. As well, SCL will be co-sponsoring the 2006 summer meeting of the American Society of Limnology and Oceanography (June, in Victoria BC) and the 2007 SIL meeting (August, in Montreal QC).



However, despite a diverse array of quality products for our members, the past decade has seen variable, but generally declining, participation by both students and non-student members at both national meetings and in the Society in general. While some variability arises from natural fluxes in national and regional limnology programs, similar patterns are also seen at the international level (e.g., SIL, ASLO) suggesting that there is a broader issue underlying downward trends. As a result of these data, the Executive produced a survey for all limnologists in Canada to determine quantitatively how best to improve participation. Further, the survey serves as a means for members to express their feelings about the future of the Society and its activities.

SCL finances



Uneven participation in SCL has created some financial difficulties, especially in regards to our annual operating budget. Specifically, while most meetings are close to break-even in terms of net revenue, the Society operates with a very low capital balance (ca. \$6000). For most other solvent societies, the minimum acceptable balance is considered to be twice the average annual operating costs. In the case of SCL, this would be equivalent to a net surplus of at least \$30,000. Therefore, the executive feels that SCL is excessively vulnerable to years of poor revenue and sought to ask the membership about the best method of addressing the problem.

SCL 2004 Survey

Objectives:

- evaluate state of SCL
- quantify membership participation
- measure awareness and values of services
- determine future direction

Methods:

- 39 short questions (y/n, rank)
- optional elaboration
- Word document format
- all SCL members and 'limnologists' (ASLO, ESA)
- anonymous submission

Responses:

- 92 total (~50% of average membership)
- 65% signed

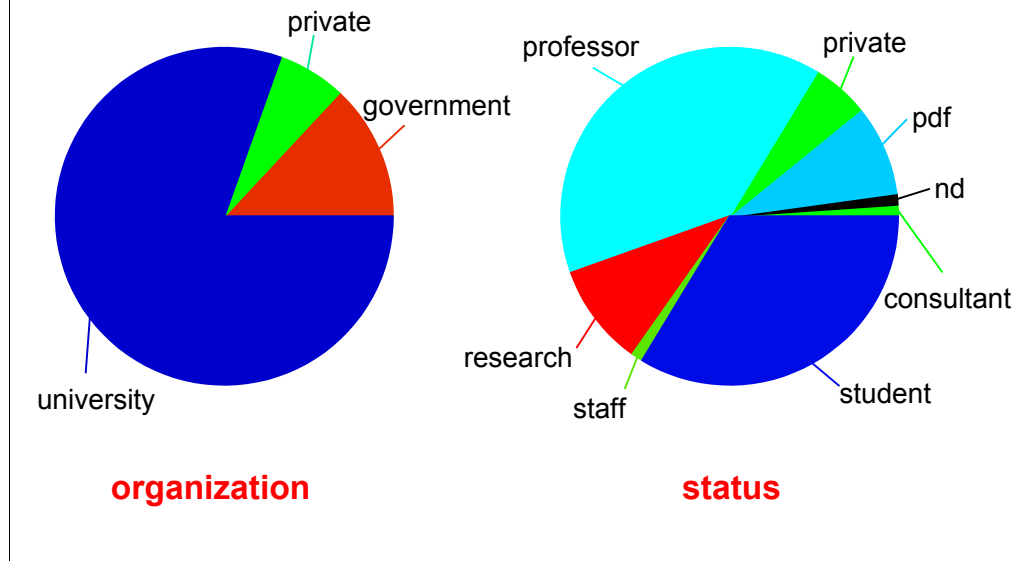
The survey was conducted in Fall 2004. All SCL members and any self-identified "limnologists" in Canada received the survey. Approximately 50% of all SCL members responded, although not all responds were from active members.



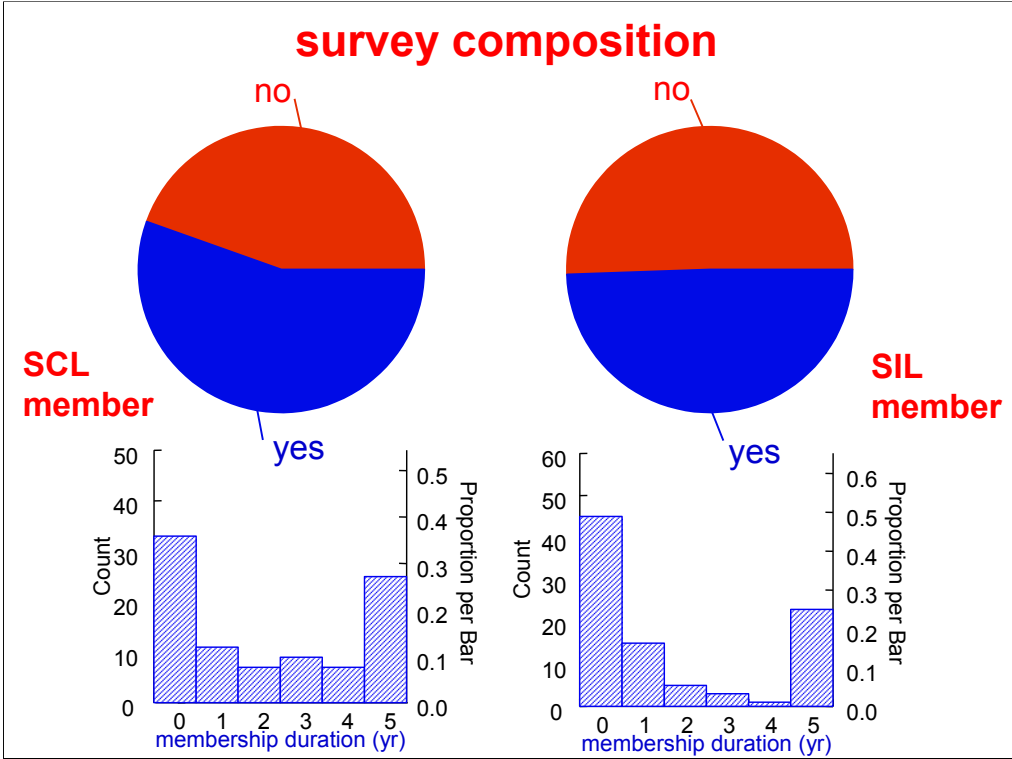
This section summarizes the composition of those responding to the survey, in terms of professional activity, SCL membership, career stage, etc.,

survey composition

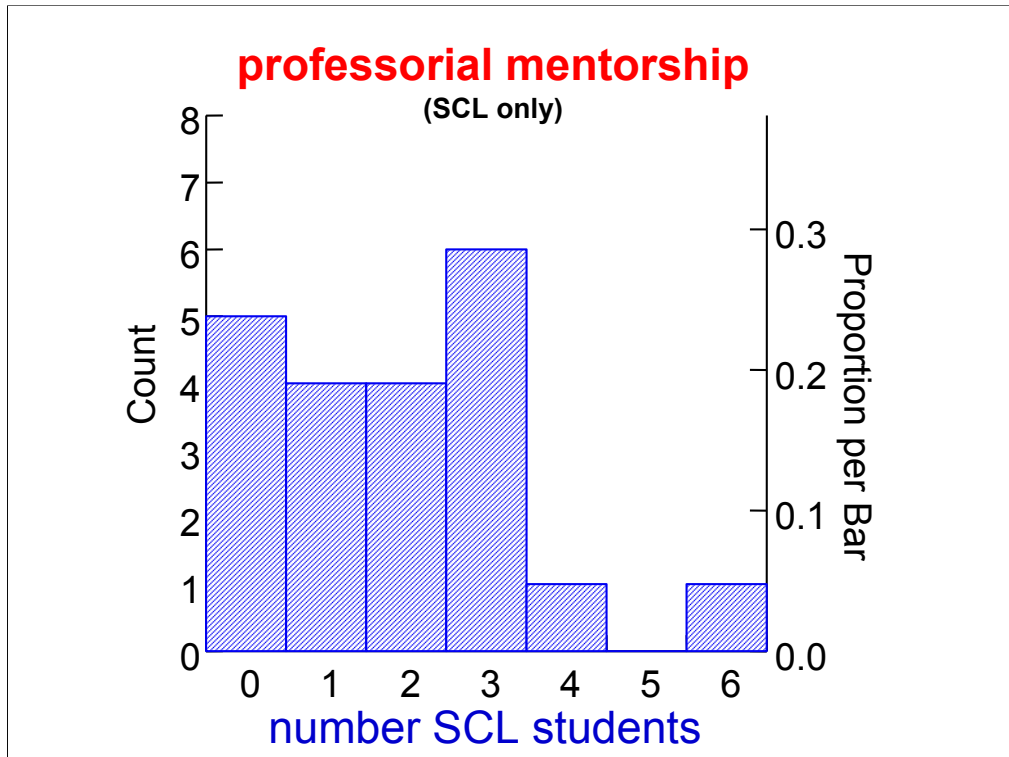
92 responses



Most responses were from members of Universities within Canada, with even distribution among professors and students.



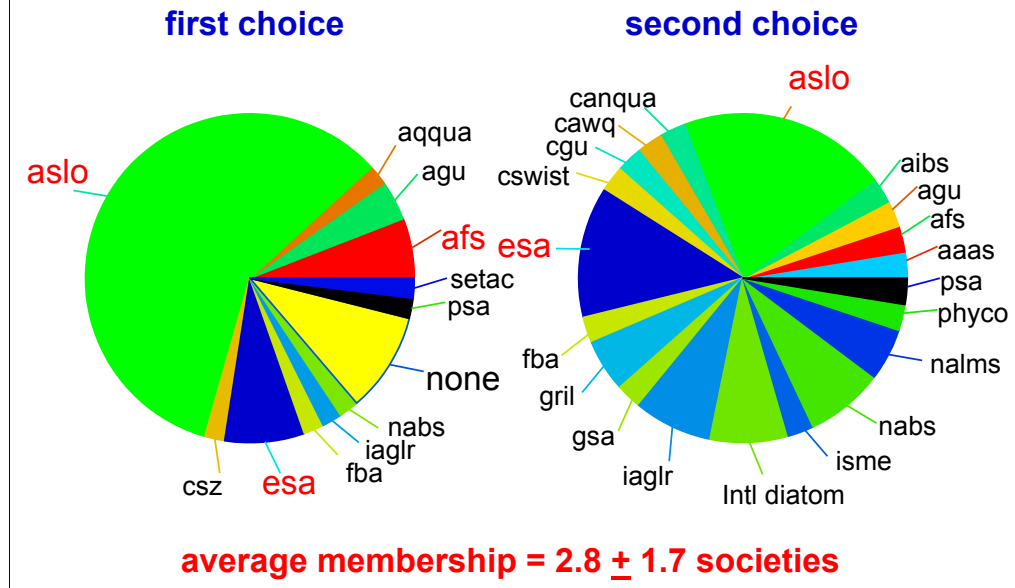
Roughly 50% of respondents were both members of SCL and SIL, although only 25-30% had been members for each of the last 5 years.



In general, professors who were members of SCL also mentored students who were members of SCL. On average, every professorial SCL member had about 2 students who were SCL members.

parallel membership

(SCL only)



In general, SCL members were also members of ASLO or the Ecological Society of America (ESA). Fully 75% of respondents identified ASLO as either their first (left) or second (right) choice as “other society that I am a member of”. In addition, SCL members also participate in a wide variety of other societies, but there are few other organizations with a broad base of support within the SCL membership. As a note to students considering how many societies to participate in, please note that the average SCL member also participates in two additional societies.

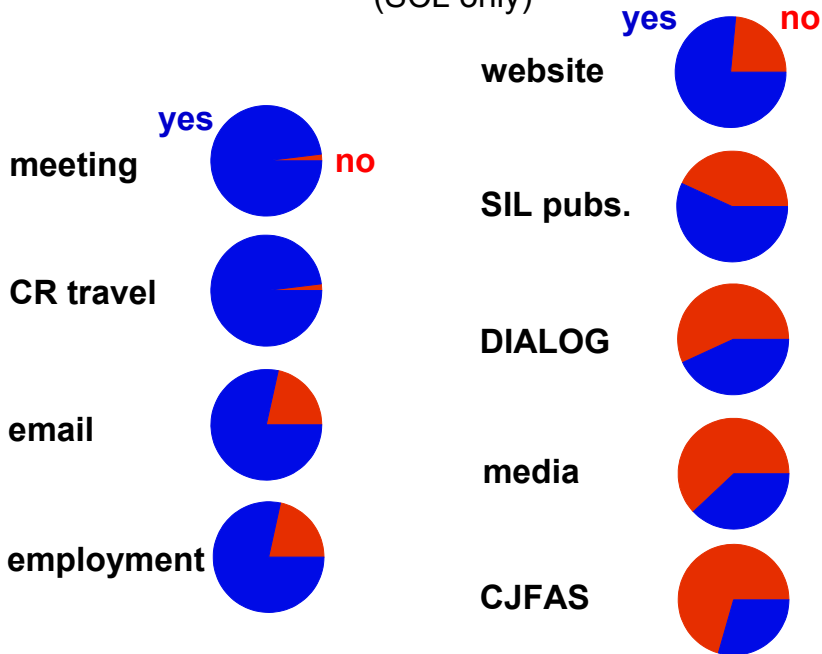
SCL services and activities



This section summarizes the awareness of SCL members of the Society's activities, and asked the members to rank the 'value' of SCL activities.

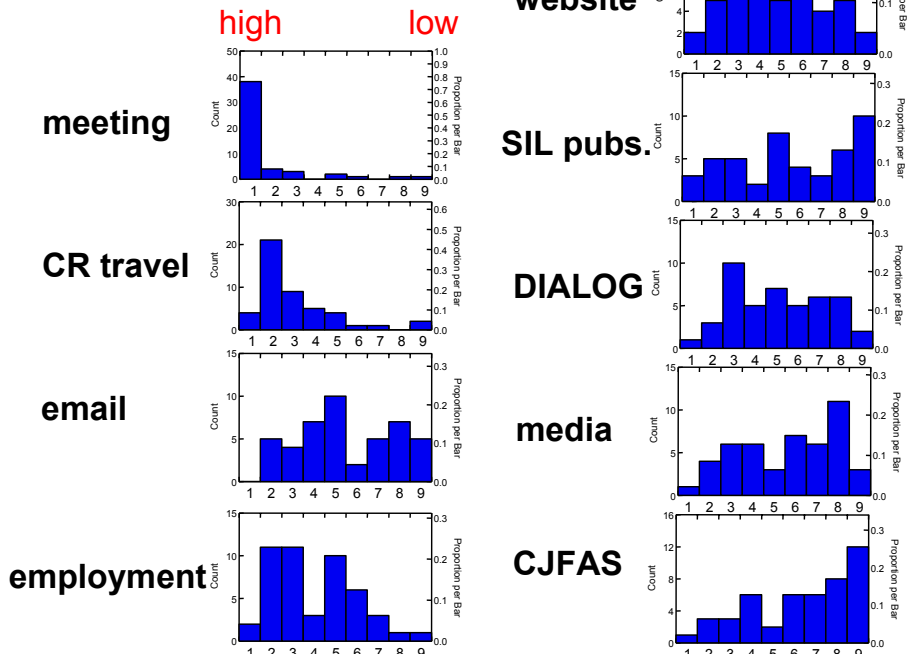
awareness of membership activities

(SCL only)

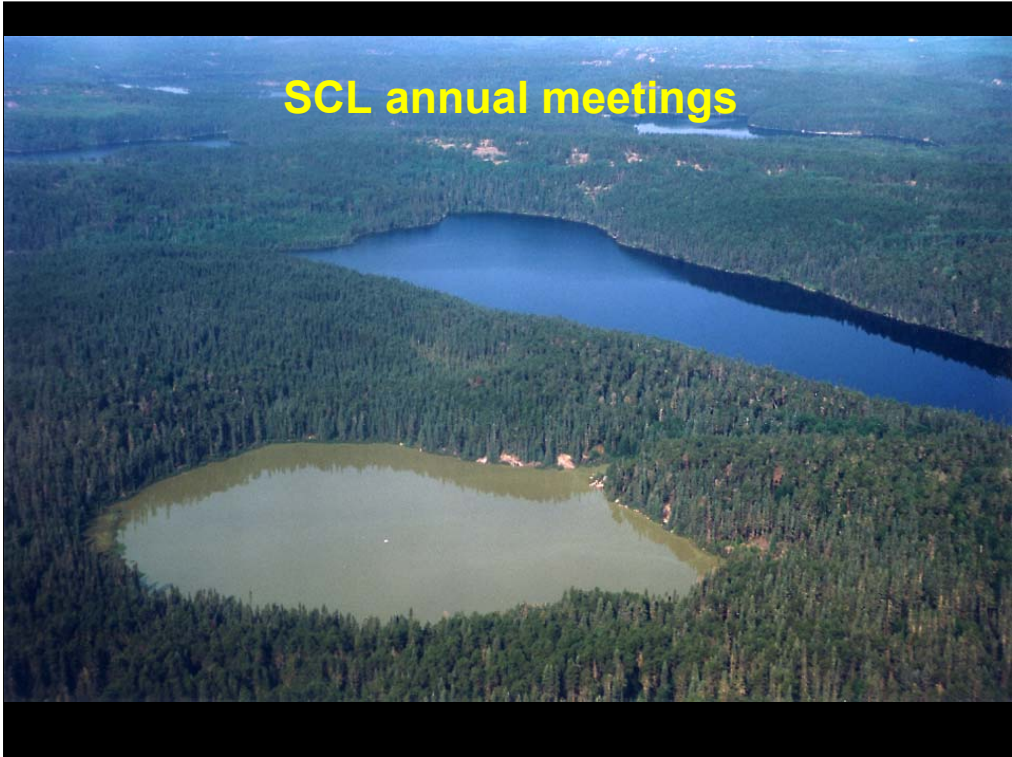


Most SCL members were reasonably well acquainted with SCL activities, particularly as regards annual meetings and communications. However, relatively new initiatives such as participation in ASLO's Dissertations Initiative for the Advancement of Limnology and Oceanography (DIALOG), media facilitation (e.g., press releases), and publications discounts were not as well known as had been anticipated.

value of membership activities (SCL only)

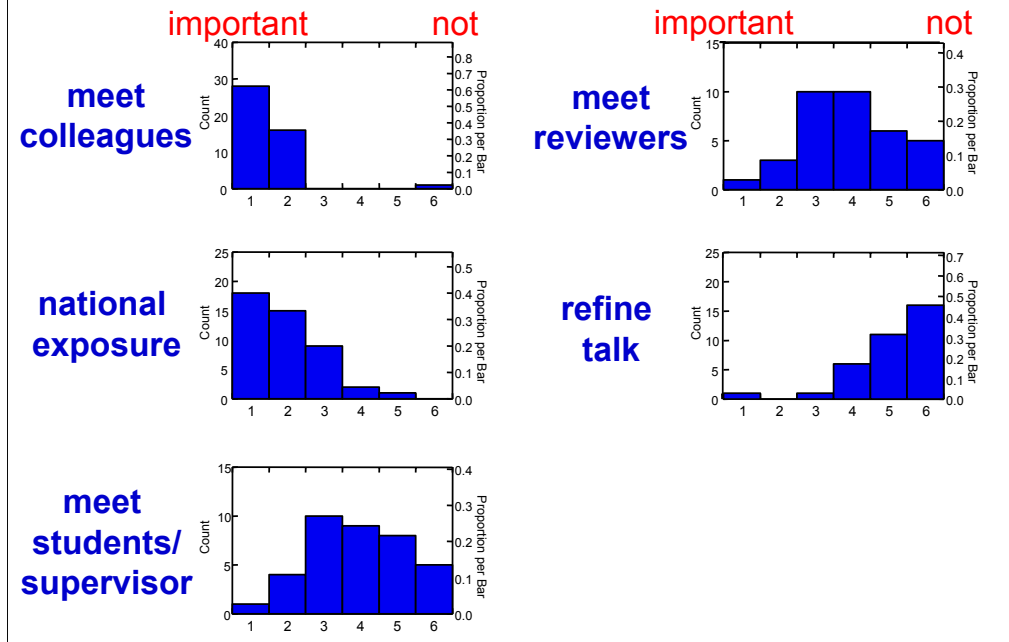


When asked to rank the value of SCL activities from 1 (highest) to 9 (lowest), most members ranked the activities in the same order as they ranked awareness. That is, well known activities such as annual meetings were most highly ranked, whereas newer initiatives were less highly regarded. In general, SCL members ranked the annual meeting as the most valued SCL activity.

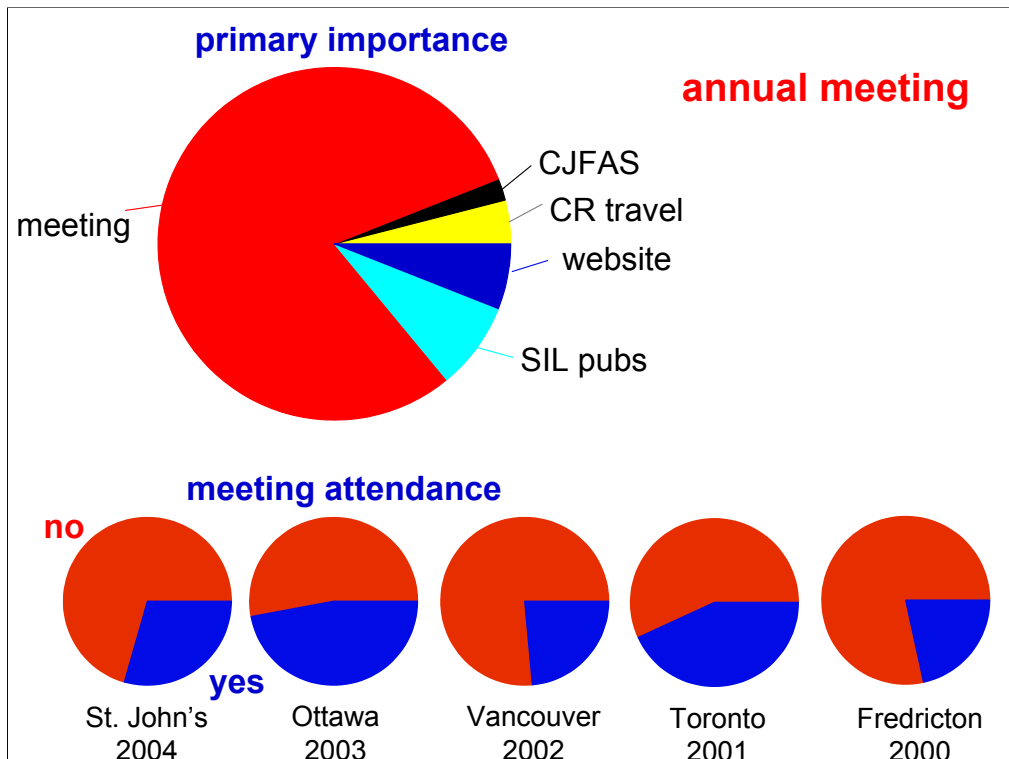


Given the importance of the annual meeting to SCL members, we sought to further evaluate the role of the meeting in SCL.

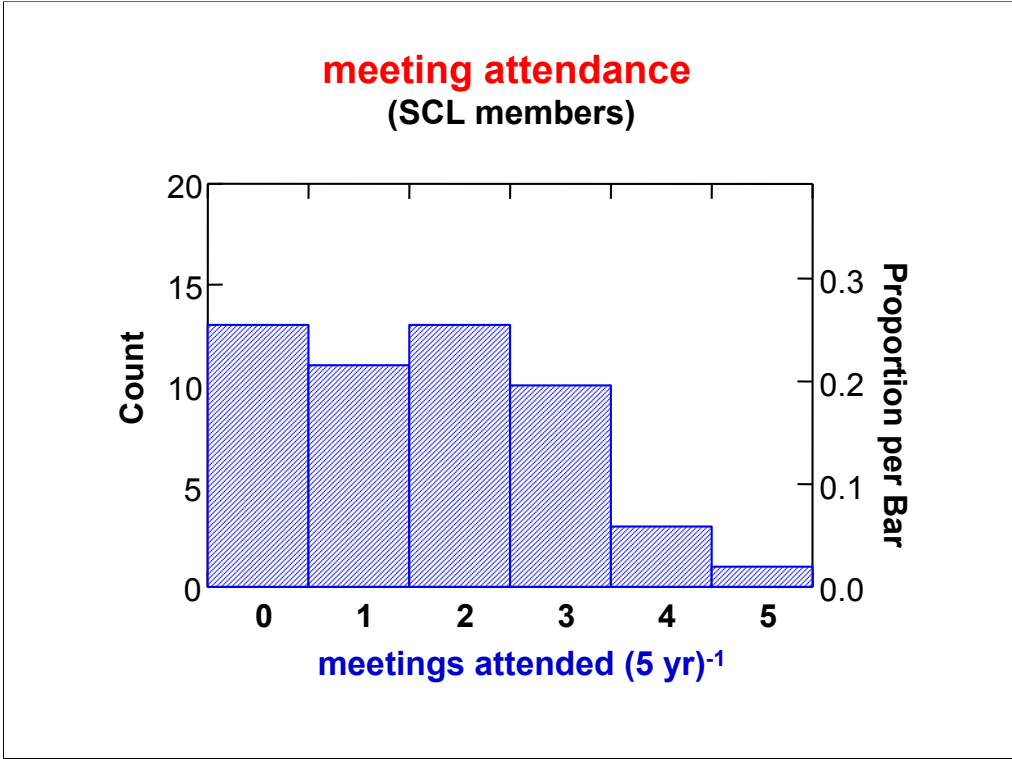
reasons for attending meetings (SCL only)



In general, SCL members attend the annual meeting to meet and present their best work to colleagues. It is gratifying to note that SCL members do not usually attend the annual meeting to polish their presentations for other societies (e.g., ASLO).

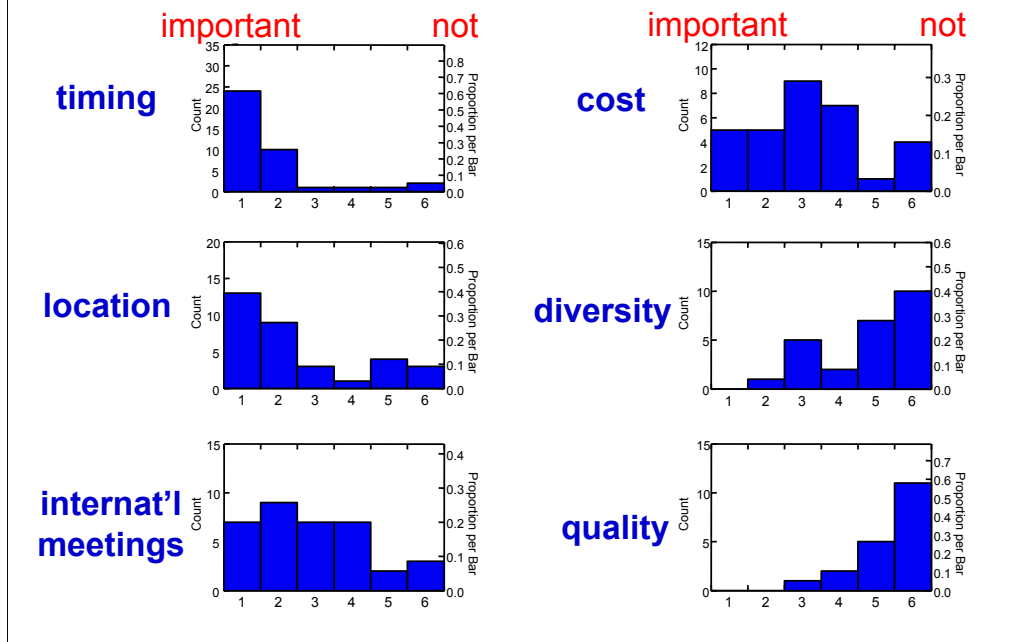


However, despite the fact that 75% of SCL members ranked the meeting as the single most important SCL activity, fewer than 50% of members attend the meeting in any given year. This number compares favourably with other major societies (usually <25%), but is more of a problem for small societies that can lack critical mass for a given meeting. In general, attendance is best for meetings with central location and is relatively low for meetings on either coast. Traditionally, SCL (through CCFR) alternates the meeting location on an annual basis, using a central-to-east-to-central-to-west rotation.



In fact, over the past 5 years, only members of the SCL executive have attended more than 3 meetings. This leads to the question: why are SCL members not attending more regularly, given that this meeting is so highly prized?

reasons for missing meetings (SCL only)



Almost 70% of SCL members stated that the timing of the meeting in early January was a problem. Specifically, written responses stated that the meeting often impacts on vacations and time otherwise spent with family members. As well, there appears to be some conflict with international meetings taking precedence, or with undesirable meeting locations. Neither the quality nor diversity of science presented was a problem for respondents, consistent with the view that SCL promotes first class research.

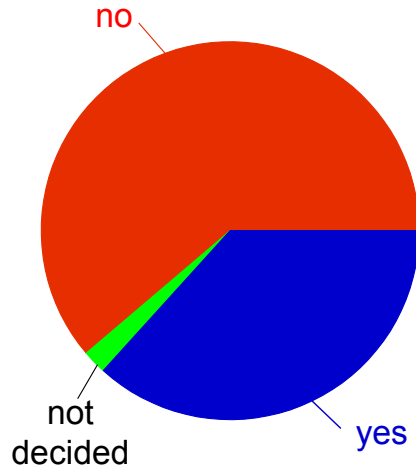
future meetings

(SCL only)

Will you attend
Calgary 2006?



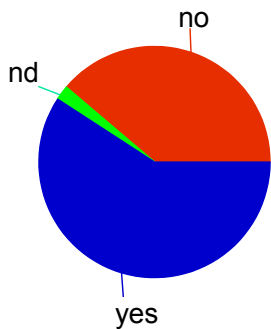
Separate meeting in
2006 (ASLO) and 2007 (SIL)?



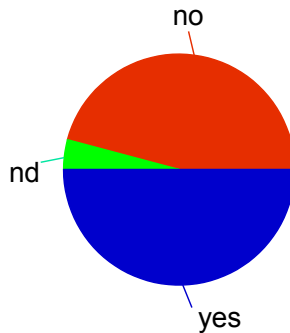
Apparently, there will be little change in attendance patterns from the 2006 annual meeting in Calgary, with ~40% of members indicating that they will attend. Many members also felt that it might be redundant to hold an annual meeting in years that SCL also co-sponsors a major international meeting. However, given that preparations for meetings takes over a year, it is unlikely that there will be any change in the meeting schedule for the next two years.

future meetings (SCL only)

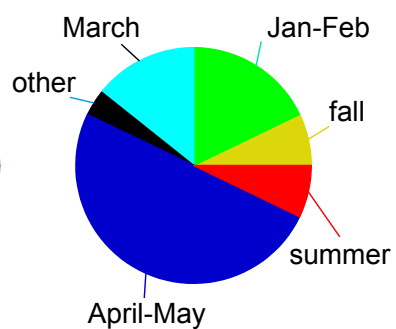
move meeting?



move meeting
without CCFR?



new meeting?



When asked how to address the conflict between meeting value and poor timing, many members suggested moving the meeting, even at the cost of separating from the Canadian Conferences for Fisheries Research. However, given that members also preferred to remain associated with CCFR (see section below), the Executive does not plan on moving the meeting unless a compromise timing can be found with CCFR. When asked, SCL members suggested that “spring” was highly desirable, especially late April-early May when most academics had finished classes and when senior undergraduate would be able to present thesis research projects.

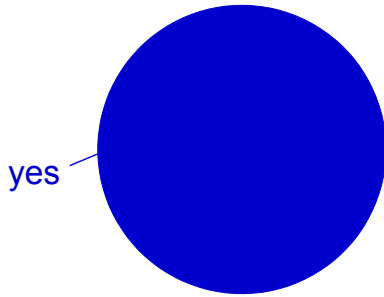


This section summarizes responses to questions about the future of the Society and its activities.

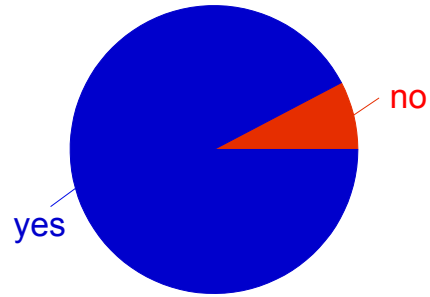
the future of SCL

Should there be a Canadian
society of limnology?

SCL members



non-members



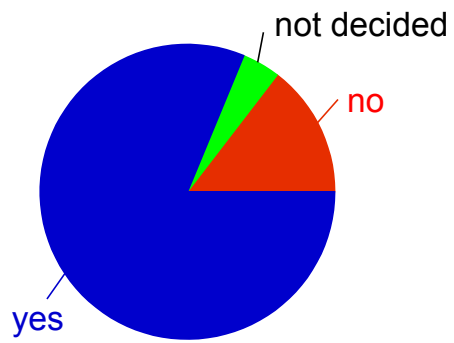
SCL members were unanimous in their desire to continue SCL. It was also gratifying that non-members also believed that the Society fulfilled an important role and should be continued. This leads to the obvious question: how should SCL attract new members?

the future of SCL (SCL only)

Should SCL remain with
CCFFR?



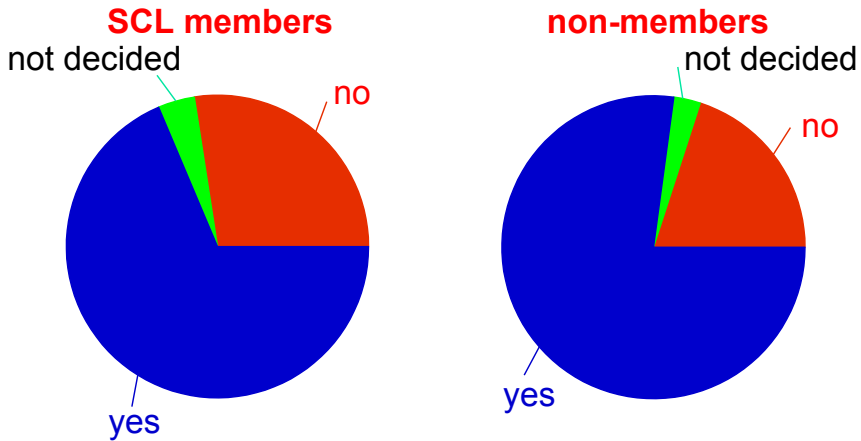
Should SCL remain with
SIL?



Overwhelmingly, SCL members desired to continue their associations with CCFFR and SIL.

the future of SCL

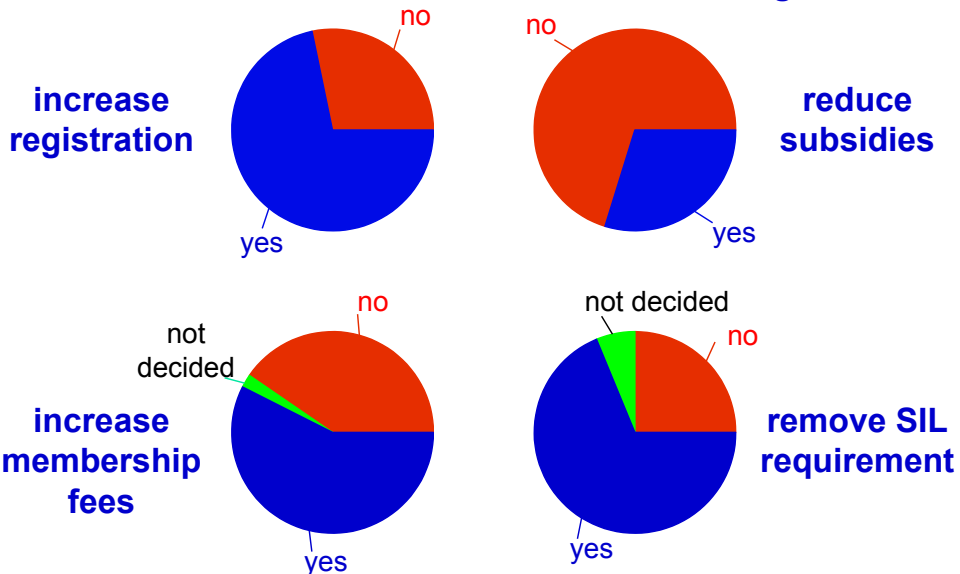
Should SCL open its membership to marine scientists?



However, SCL members also felt that the Society would benefit from the addition of marine scientists and other ‘non-limnologists’ (e.g., benthic ecologists, SETAC members, etc.). While this would necessitate a name change of the society, there was general consensus that the development of a more inclusive “Society of Aquatic Sciences” was an important avenue to both increase membership and serve the promotion of aquatic sciences in Canada.

the future of SCL (SCL only)

How should SCL achieve a balanced budget?



Most members also felt that fees should be increased as needed to sustain SCL, so long as student subsidies were maintained. In particular, the membership clearly indicated that while it prefers to continue associations with SIL, the executive should move to eliminate mandatory membership in SIL.

Conclusions

- SCL members are predominantly affiliated with university and government research. Overlap with ASLO and ESA.
- Finances modest and membership declining despite clear support for SCL and activities.
- Membership could increase (freshwater, marine).
- Members unaware of many services.
- Annual meetings are most valued, but attendance poor because of timing. Spring meeting recommended.
- SCL should retain formal associations with CCFFR and SIL, but remove fee requirements.
- Registration and membership fees should increase to balance budget.

In conclusion, the survey indicated that SCL members were also active internationally, with memberships in both ASLO and ESA predominantly. While most members value the activities that they were aware of, there was uneven knowledge about some of the newer Society ventures. This pattern suggests that the Executive needs to be more pro-active in promoting and maintaining member awareness of Society benefits. Further, the membership clearly indicated that while it highly valued the annual meeting, efforts should be made to change the timing of the meeting to increase accessibility. Finally, SCL members clearly gave the Executive a mandate to modify membership requirements and fees to better reflect the goals of SCL and to enhance financial solvency. To this end, SCL will begin discussions with CMOS and other marine organizations, and will plan on increasing membership fees in 2006.