

Graduate Student Recruitment.

Position paper from the UCAR BOT subcommittee
J. Fellows, D. Houghton, D. Thomson, and G. Vali.

December 22, 1999

MOTIVATION AND GENERAL IDEA:

Comments and discussions among atmospheric and oceanographic science faculty from several universities appear to indicate a declining satisfaction with graduate student enrollment, principally in quality and secondarily in the number of students. Similar views are expressed in a number of publications ([REFERENCES](#)). It seems that a serious effort to gage the current enrollment and employment situation, and trends over the recent past, is warranted. If the problem is real, consideration should be given to recruitment activities to improve the situation. Clearly, future progress in the atmospheric and oceanic sciences is dependent on the upcoming generations of scientists. A closely related issue is whether the contents and emphases of current graduate programs are in concert with changes in the expected careers of the graduates.

From the foregoing, the question arose whether a useful role might be played by UCAR and AMS (i) to **facilitate recruitment efforts for the discipline**, i.e. in a broader sense and more intensely than what individual universities are capable of conducting, and (ii) to **help assess changes in what is needed in graduate education**.

When beginning to consider these issues, it became rapidly evident that our community lacks systematic data gathering of the type that would allow such questions to be examined. While some data exists in the AMS/UCAR Curricula Guide it is relatively meager. Thus, we realized that part of the effort will have to be an examination of how an enhanced, long-term data gathering activity might be initiated. Many other professional groups, the most closely related of which is CORE, conduct fairly extensive research on graduate student entry and employment. While it is not likely that the scale of those efforts could be matched by us they are helpful examples and provide comparison material.

Because of the close connection between graduate student enrollment and employment outlook for the graduates, part of the effort will have to be an attempt to assess that outlook and to provide for its periodic updating.

Both the AMS and UCAR has several relevant ongoing activities. The AMS/UCAR Curricula Guide is one. Other surveys and Commission activities exist. UCAR/NCAR has the ASP, PAGE and SOAR programs.

It should need no mention that the principal responsibility for recruiting remains with the individual universities. Whatever joint recruiting activity is finally deemed useful, it will have to stand on the merits of efficiency and effectiveness beyond what individual schools can accomplish.

GOALS:

Briefly stated, the goals of the survey and recruiting activities would be: 1. To attract the most promising young talent to the atmospheric and oceanic sciences, and 2. To help make graduate student education fulfill scientific and societal goals the best possible way.

PROPOSED INITIAL ACTIONS:

1. Formulate a survey that would provide an indication of how much agreement there is about the points raised in the preceding description of the situation, and to measure community support for further action.
2. Consider what type of long term monitoring activity to organize.
3. Examine funding options.

POSSIBLE LATER ACTIVITIES (sketchy ideas).

Should the survey (point 1) support the idea of coordinated recruiting and assessment, some possible activities might be the following:

4. Continued monitoring of enrollment and employment trends is a core task.
5. Visits to undergraduate schools to talk about the gamut of interests in the discipline. Develop good supporting material for these visits.
6. Include liberal arts colleges in these visits.
7. Preparation of high quality information about careers and the diversity of graduate programs,
8. Information sessions for undergraduate advisors and science teachers.