

# DEPARTMENT OF FISH AND WILDLIFE CONSERVATION POLICY AND GUIDELINES FOR PROMOTION AND TENURE

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## 1. Context

Promotion to a higher rank and appointment with tenure may be granted to faculty members on standard faculty appointments who have demonstrated accomplishments in an appropriate combination of teaching, research, engagement, and other professional activities. This document outlines expectations of and procedures for evaluation of faculty performance for purposes of reaching a recommendation regarding the granting of promotion or tenure. Nothing in these recommendations shall contravene provisions regarding promotion and tenure as presented in the Virginia Polytechnic Institute and State University *Faculty Handbook* ([http://provost.vt.edu/faculty\\_affairs/faculty\\_handbook.html](http://provost.vt.edu/faculty_affairs/faculty_handbook.html)) or policy set by the College of Natural Resources and Environment (<http://cnre.vt.edu/faculty/resources/promotion-tenure-policies.pdf>).

## 2. Department Promotion and Tenure Committee

The Department shall have a Promotion and Tenure Committee with appropriate faculty representation to evaluate candidates for promotions and tenure, and to make recommendations to the Department Head. The Department Head will charge the committee and provide materials for review, but will remain separate from the committee's deliberations and will subsequently receive its recommendations. The Department Head may make presentations on each candidate as requested by the committee.

The Department Promotion and Tenure Committee will be composed of a total of seven individuals, five who vote at the departmental level and two who vote at the college level. Committee membership will be determined annually through a two-stage election process (and one appointment). Six faculty members will be selected to serve on the Department Promotion and Tenure committee on a basis of a vote of the tenured and tenure-track departmental faculty, and the Head of the Department will appoint one additional member of the committee.

All tenured faculty members are eligible for selection to the Department Promotion and Tenure Committee. While university policy presented in the *Faculty Handbook* does not mandate that members of the Department Promotion and Tenure Committee be full professors, it is clear that the review process may benefit from the perspective of a full professor, especially when a possible appointment to the rank of full professor is under consideration. Hence, faculty members are encouraged to consider voting for full professors and the department head to appoint a full professor to the Department Promotion and Tenure Committee in situations where a promotion to full professor is considered.

Once the seven-member committee is formed, two members of the Department Promotion and Tenure Committee will be elected by the committee to serve on the College of Natural Resources and Environment Promotion and Tenure Committee. These individuals may participate in the discussion of dossiers for candidates for promotion and tenure at the department level, but will not vote at the departmental level.

The Department Promotion and Tenure Committee will elect its chair. The chair of the Department Promotion and Tenure Committee will work with the Department Head to assure that all requests for promotion or tenure and any required pre-tenure reviews are completed and materials forwarded to the college level on a timely basis.

## 3. Timeline

### 3.1 The Candidate Narrative

The candidate's narrative is a critical component of the dossier where they can establish their credentials and accomplishments in the context of their position expectations. Each new faculty member should begin to develop their narrative well before their second-year review in conjunction with the department head. Their narrative should be updated and reviewed annually by the Department Head and the Department Promotion and Tenure Committee.

### 3.2 Pre-tenure Probationary Period and Progress Review

Faculty will be evaluated in their second and fourth year of residence in the program. These reviews will be based on a summative report that is submitted by the candidate to the Department Head and the Promotion and Tenure Committee by June 30 of their second and fourth years. The committee will provide feedback to the candidate no later than September 15.

### 3.3 Request for Consideration for Promotion or Tenure

Faculty wishing to be considered for tenure and promotion to Associate Professor or promotion to Professor should notify the Department Head by February 1<sup>st</sup> of the academic year proceeding the year they wish to be considered. The Department Head will make a request to all faculty for cases of promotion and tenure in January for the upcoming academic year. Faculty requesting non-mandatory consideration for promotion or tenure can withdraw their requests at any time in the consideration process.

### 3.4 Annual Timeline

The timeline for candidates for promotion with tenure and promotion to professor is:

- Feb 1<sup>st</sup>—Faculty requesting considered for promotion or tenure in the upcoming academic calendar year notifies the Department Head.
- March faculty meeting—Elections held to establish Department of Fish and Wildlife Sciences Promotion and Tenure Committee for the upcoming academic year.
- April 1<sup>st</sup>—Dossier of candidates for promotion or tenure submitted to the Department Promotion and Tenure Committee and the Department Head for initial review.
- May 15<sup>th</sup>—Comments from the Department Head and Department Promotion and Tenure Committee returned to faculty member for incorporation into the dossier.
- June 1<sup>st</sup> —Committee and candidate provide suggestions for external reviewers. Committee takes a non-binding vote in case of early tenure or request for early promotion to Professor.
- June 1<sup>st</sup> to 30<sup>th</sup>—Department Head contacts external reviewers.
- July 1<sup>st</sup> to 15<sup>th</sup>—Revised dossier sent to external reviewers. Department Head sends reminders as needed.
- August 31<sup>st</sup>—External reviews received and included in the dossier.
- 1<sup>st</sup> week of October—Promotion and tenure committee convenes and evaluates dossiers for promotion and tenure. Committee makes a binding vote and communicates to Department Head.

- November 1–Dossier package with committee and Department Head letters forwarded to the College of Natural Resources and Environment Promotion and Tenure Committee.

4. **Departmental evaluation** The committee shall review the cases of all faculty members who submit their credentials to the Department Head for consideration for promotion or tenure, including those faculty members in the sixth year of probationary service. The Department Head furnishes the committee with a dossier for each candidate. The form and contents of each dossier will be in accordance with the most recent Promotion and Tenure Guidelines distributed by the Provost.

The dossier will include a statement by the Department Head. This statement should be limited to 3 to 4 pages, and should include:

1. A summary of the candidate's professional assignment at Virginia Tech.
2. An evaluation of the academic performance and effectiveness of the candidate in each of the areas of faculty responsibility – teaching and academic advising; research, scholarly, and/or creative achievement; and public service, engagement and extension. This evaluation may be presented in the context of a national peer cohort selected for comparison by the candidate, Department Head, and Department Promotion and Tenure Committee.
3. A summary of important accomplishments and interpretation of significant contributions.
4. An explanation of the procedures by which the candidate was evaluated.
5. The Department Head's recommendation regarding promotion and tenure.

Refer to section 5. Standards and Criteria for Promotion and Tenure Decisions and the Provost's website (includes directions and templates) for details on dossier preparation.

Peer teaching reviews should be completed and accompany the promotion and tenure dossier for all candidates. Peer teaching reviews should be thoughtful, constructive assessments of a candidate's teaching effort based upon a good-faith effort to gain a thorough sense of the candidate's teaching abilities. The first peer review should take place within the first two years of the candidate's first tenure-track appointment. A second review is mandatory. See the Department of Fish and Wildlife Conservation's Policy and Procedures for Peer Review of Teaching.

At least six evaluative letters from external assessors will be solicited and, where available, should be included with the materials sent forth to the Department Promotion and Tenure Committee for all candidates. External reviewers will be selected from a list of individuals provided by the candidate, the Department Promotion and Tenure Committee, and the Department Head. External reviewers should not be individuals who were mentors or with whom the candidate has collaborated (e.g, former academic advisors, co-principal investigators with substantial interaction with the candidate, or co-authors on papers that resulted from considerable collaboration).

The Department Promotion and Tenure Committee will make a recommendation regarding each candidate to the Department Head, including a written evaluation that assesses the quality of the candidate's performance in each relevant mission area. The committee will reach its recommendation by means of a binding confidential vote, the outcome of which is determined by a simple majority. The vote is included in

the letter to the Department Head. The committee chairperson will notified the Department Head of the committee's decision and vote count.

In all cases of mandatory (sixth-year) tenure decisions, the Department Head will pass on to the Dean the dossier of every candidate, which will include the committee's evaluation and recommendation (including the division of the vote) and the head's own recommendation, whether concurring or not. Should the committee and the Department Head agree on a negative recommendation, the Dean may declare this to be the final decision or may choose to have the recommendation reviewed by the college committee. The Department Head will inform the faculty member of a negative decision and their appeal options.

A candidate may be considered for promotion and tenure before the sixth year of service, although the expectation would be that the candidate had clearly exceeded the expected standards and criteria for promotion and tenure (see page 6). In the case of promotion or tenure before the sixth year of probationary service, the Department Head will follow the same procedures, except that, when the committee's recommendation is negative and the head concurs, the head declares a final decision and no further review is carried out in that academic year. The Department Head will inform the faculty member of a negative decision, in which case the candidate would submit the dossier the mandatory year.

Accompanying the set of dossiers submitted to the college level will be a statement from the Department Head describing the formation and procedures of the Department Promotion and Tenure Committee and summarizing the number of candidates in each category (mandatory tenure, pre-sixth year tenure, promotion at each rank).

Considerations of rank for federal faculty will undergo the same process as for university faculty as far as consideration by the Department and College Promotion and Tenure Committee, but will not be forwarded to the university committee. That is, the final decision is rendered at the college level.

The research professor ranks – Research Assistant Professor, Research Associate Professor, and Research Professor – are designed for research faculty members whose appointments are expected to last more than one year and whose credentials are comparable to those of tenure-track faculty of the same rank. In accord with the Faculty Handbook (Section 2.3.5 and 6.5), research professorial faculty members being considered for promotion will have their dossiers reviewed at three levels: (1) by the Department Promotion and Tenure Committee and the Department Head; (2) by the College of Natural Resources and Environment Promotion and Tenure Committee and the Dean; (3) by the Office of the Vice President for Research.

The Department Promotion and Tenure Committee will also review the dossiers of faculty who are undergoing their two- or four-year review. The committee will provide comments highlighting the strengths of the dossier, and recommendations for areas where the individual should seek to strengthen their credentials in anticipation of candidacy for promotion and tenure. The elected chair or designee of the Department Promotion and Tenure Committee and the Department Head will meet with pre-tenure faculty to discuss the outcome of the two- and four-year reviews.

## 5. Standards and Criteria for Promotion and Tenure Decisions

### 5.1 Intent

By generally outlining expectations and criteria for promotion and tenure we hope to:

1. Promote clarity regarding Departmental standards and types of evidence considered when judging a candidate for tenure and promotion to Associate Professor and promotion to Professor.
2. Promote openness about our measures of performance, approaches for constructive criticism about areas of concern during pre-tenure decisions, and guidance for improvement.
3. Ensure confidentiality during deliberations.

### 5.2 General expectations

The candidate must demonstrate quality of scholarship, which includes teaching, research, and engagement. Most candidates will come forward with stronger dossiers than the standards described here. Our intent is to help candidates assess their progress toward achieving a compelling case for promotion or tenure. Candidates are encouraged to discuss these standards and their own progress with the Department Head and senior faculty. These recommendations are not meant as a substitute for, but rather as a supplement to, regular interactions among colleagues regarding a candidate's development and progress towards tenure and promotion.

Fundamentally, the awarding of tenure is a recognition of excellent performance that gives reason to anticipate a vibrant and productive lifetime career at the University. The body of scholarly work will be assessed by the following questions:

- Does the work advance the field?
- Does the work reflect increasing professional competence?
- Does the work reflect standards of excellence in teaching, research, and engagement?
- Is the work valued by other professionals as evidenced by peer reviews, applications, citations, awards, or other recognitions?
- Does the work show evidence of commitment to inclusion and diversity?
- Does the work compare well to that of peers at our peer and aspirational institutions?

Promotion to associate professor with tenure should “imply few, if any, lingering doubts about the value of a candidate to the department's program for a “lifetime” (Faculty Handbook 2017; Section 3.4.4). Candidates for tenure and promotion are expected to be both active research scholars and effective teachers of undergraduate and graduate students, demonstrating substantial scholarship and ability to promote learning through on-campus or off-campus education programs. The essence of scholarship is the innovative discovery, transmission, and application of knowledge that is based on the ideas and methods of disciplines, professions, and interdisciplinary fields in or associated with fisheries and wildlife sciences.

We recognize that faculty members, including non-University faculty, have unique positions and varied appointments for teaching, research, and engagement. We support promotion of individuals who have demonstrated outstanding accomplishments in a combination of instructional, research, outreach,

extension, service, and other professional activities appropriate to their appointment. The Department Head will provide a specific position description for each candidate, specifically addressing any issues of disproportionate teaching, service, administrative load, or changing appointment over time. For reference, a 50% teaching appointment is normally 1-1/2 to 2 courses per year. Greater or lesser teaching loads would lead to lesser or greater expectation, respectively, for achievement in other mission areas. We acknowledge that teaching of laboratory courses is more time-consuming than that for non-laboratory courses. Similarly, faculty who are asked to develop multiple new courses, even if they end up teaching two per year, face a heavier burden than those who assume delivery of existing courses.

Within six months of joining the faculty, the faculty member and Department Head should jointly develop a narrative that establishes the professional goals of the faculty member. These may include aspirations and goals for the nature of the research program, classes to be taught or developed, and how the faculty member envisions engaging with the department, university, and profession. This document should establish measurable benchmarks by which the faculty member may be evaluated. The faculty member should indicate how her/his goals integrate with and complement the larger department goals and direction.

For evaluation, the faculty member's body of work should be presented in the context of others working in the field at a national level. The Department Promotion and Tenure Committee will evaluate the quality, quantity, and influence of scholarly contributions. The Department Head will develop and maintain a data base of metrics related to scholarship within the department, and in the peer and aspirational institutions selected by the department. The department metrics will include the median number (and range) of publications, presentations, classes taught, research expenditures, and other relevant achievements based on the dossiers of faculty receiving tenure or promotion in the previous 10 years in the department. Similar data will be collected and maintained for our peer and aspirational peer institutions. Data will be summarized in the sub-disciplines represented in the department. This information is contained in the appendix to this document and will be updated at least every three years. While it is not required that the candidate include comparisons to peers in the dossier, having such comparisons may strengthen the candidate's case.

### 5.3 Pre-tenure expectations

This table summarizes the expectations at the 2-year and 4-year review of tenure-track faculty.

	2-year review	4-year review
Teaching	Evidence of satisfactory classroom teaching at undergraduate and graduate levels. Clear and up-to-date syllabi. Available and knowledgeable for undergraduate mentoring and graduate student mentoring. Participation in teaching workshops.	Presentation of candidate's statement expressing a cogent statement of teaching philosophy. Good classroom teaching, successful effort to improve, reliable student mentoring and academic advising. Good peer reviews of instruction.

Research	Peer cohort has been identified and benchmarks established. Publications from faculty member’s own doctoral and postdoctoral research studies.  Grant support for research.	Completion of some research projects  Regular scholarly publications of high quality and high impact in line with production of aspirational peers.  Grants and contracts received to support research program.  Scholarly publications with mentored students.  Candidate’s statement includes focused research plans with high likelihood of successful completion.
Engagement	Support to governance of department, and possibly also to college, university, profession, or society.	Initiative and responsible actions to address needs of students, department, college, profession, and/or society.

**5.4 Award of tenure and promotion to Associate Professor**

**5.3.1 Research**

Standard metrics of research performance include research publications, invited research presentations, external research funding, and the mentoring of graduate students. A fish and wildlife faculty member who meets or exceeds expectations for promotion to Associate Professor will demonstrate an emerging national reputation and typically has:

(a) Published research articles in high-quality, refereed journals, some of which are from research performed largely while a faculty member at Virginia Tech. The rate of publication should be in line with the information provided in the appendix. These publications primarily should describe the results of her/his independent research and research done collaboratively with graduate students. Books, book chapters, edited or co-edited collections of articles, reviews, or awarded patents may substitute for some, but not all, of the publications. Online publications count equally with print publications, provided they appear in professionally refereed collections. Quality of papers is more important than numbers, and candidates should provide information to document quality. We value *excellent basic and applied science with relevance to conservation or management of natural resources*.

(b) Presented presentations on his/her research at nationally recognized meetings and peer academic institutions.

(c) Demonstrated the ability to obtain funding at a level appropriate for long-term support of an independent research program and graduate students.

(d) Mentored a number of graduate students in line with those of peers and aspirational peers (refer to appendix). While mentorship of graduate students is expected, mentorship of post-doctoral fellows also is recognized as a positive contribution.

### 5.3.2 Teaching

On the basis of documented assessment of student learning, alumni testimonials, student evaluations, peer reviews, awards, and participation in efforts to improve teaching (including departmental, college, or university activities related to teaching, teaching forums at professional meetings, visiting other instructors' classes, and reading the literature), the candidate must demonstrate effectiveness as a teacher in the classroom, in student mentoring, in his/her writings, in direction of graduate and undergraduate research, or other forms of instruction involving students. Demonstrating a new or unique contribution to the teaching program is valued. Candidates who are assigned to take over existing courses should document how they have improved and added to the course.

Candidates whose record reflects difficulty in teaching also must be able to document steps they have taken to correct these problems, and the record must indicate, in the form of student evaluations, peer evaluations, or other means, that significant improvement has occurred. The candidate may provide any of the following information to evaluate the effectiveness of learning.

**(a)** Student learning may be documented in a variety of ways specific to the candidates teaching. Student evaluations of teaching will be compared to historical evaluations for the same course (rather than just to a departmental or college average), and the candidate's own trajectory will be examined to assess performance.

**(b)** Peer evaluations of teaching typically will be conducted in the second year and subsequent year of teaching a course, and will be conducted consistently with discussion and feedback, and will follow an approved protocol.

**(c)** Candidates whose teaching performance is considered strong based on student and/or peer reviews of teaching are encouraged to participate in mechanisms to advance their pedagogy. Candidates needing improvement are expected to demonstrate participation in multiple mechanisms to improve their teaching.

**(d)** Graduate mentoring and service on graduate committees in and outside of our department.

### 5.3.3 Cooperative extension

Research and teaching expectations for Extension Specialists will be set as negotiated during initial appointment or annual re-adjustment of position expectations.

Standard metrics used to measure extension performance include number of peer-reviewed extension bulletins, workshops, short-courses, and grants and contracts. Based on client evaluations, contacts, peer reviews, awards, and participation in workshops and short-courses related to cooperative extension, the candidate must demonstrate effectiveness in developing and delivering research-based educational programs to a well-defined off-campus audience or client base.

A Fish and Wildlife Extension Specialist who successfully meets or exceeds expectations for promotion to Associate Professor will demonstrate an emerging national reputation and typically has:

**(a)** Published extension publications at a rate at least similar to peer metrics (see appendix for data). These publications should at least in part describe the extension of her/his independent research program. Books, book chapters, journal articles, edited or co-edited collections of articles, reviews, or awarded patents may substitute for some, but not all, of the publications. Online publications count equally with print publications, provided they appear in recognized and professionally refereed collections.

**(b)** Workshops and delivered educational programs.

#### 5.3.4 Engagement

Engagement can be interpreted broadly to mean participation in activities that contribute to the life of the department, the College, the University, the discipline, and society on issues relevant to the candidate's expertise. Successful candidates for tenure and/or promotion to associate professor are expected to attend departmental meetings, to render effective service on student and departmental committees, and, if asked to serve, limited service on College and University committees and governing bodies. Reasonable expectation might be service on one departmental committee per year, peer review of teaching, advising student groups, with additional service on college, university, or search committees in the last year or two before candidacy for promotion and tenure. Traditional methods of evaluating scholarly faculty productivity (grants and scholarly publication) may not be adequate for evaluating scholarly engagement. Engagement in the form of university-community collaboration is recognized expressly in the promotion and tenure process as important faculty work. Service to the profession includes reviews of manuscripts and proposals, efforts to increase representation of women, minorities and unrepresented groups in the institution and profession, serving as an officer or on committees of professional societies, and work on review panels. Organizing symposia at professional meetings and serving on editorial boards of journals are valued, but not expected of most candidates at this stage.

We expect all candidates for tenure to demonstrate relationships with communities and partners that are appropriate for the scholarly exchange of ideas relevant to her/his expertise. This may be demonstrated by patents, participation in continuing education, in-service training of cooperative extension agents, training community groups (e.g., Master Naturalists), regional, national or international research or development committees, commissions, or centers, international education, service learning and experiential education, and scholarly publication in outlets not typically read by the candidate's peers. Publications generally are expected to be peer-reviewed; however, we recognize that the scholarship of engagement often involves non-traditional modes of peer review, including review by partners, clients, and multi- or inter-disciplinary professionals.

Some degree of involvement in service to institution, discipline, and society would be expected of successful candidates for promotion and tenure.

The department nurtures a climate welcoming to all, and it is expected that candidates will recognize the importance of inclusion and diversity in all aspects of their program. The candidate may reflect this by developing a diverse research laboratory group, implementing inclusive pedagogy in the classroom,

professional engagement that promotes inclusion and diversity and involvement with other units on campus that enhance inclusion and diversity.

## 5.5 Award of tenure to candidates for whom the initial appointment was at the Associate Professor level

A strong dossier for tenure will approximate the criteria applied to the period of university service for the rank of Associate Professor as described above.

## 5.6 PROMOTION TO FULL PROFESSOR

Candidates for full professor are expected to have made important contributions to their chosen area of specialization and to possess a national or international reputation for excellent scholarship and leadership in his/her specific discipline. We recognize that while there will likely be much variation among candidates at this level, there is an expectation of high contributions in the engagement mission. As for promotion and tenure, a candidate for Professor should present their accomplishments in the context of their peer and aspirational peer subdiscipline benchmarks in the appendix.

### 5.6.1 Teaching

Based on student evaluations, peer reviews, awards, and participation in departmental and/or college or university activities related to teaching, the candidate must demonstrate effectiveness and maturity as a teacher in the classroom, in student advising, in direction of graduate or undergraduate research, or other forms of instruction involving students.

Candidates whose record reflects difficulty in teaching also must be able to document steps they have taken to correct these problems, and the record must reflect, in the form of student evaluations, peer evaluations, or other means, that significant improvement has occurred.

### 5.6.2 Research

Promotion to Professor depends on demonstration of significant achievement in the research area. Standard metrics of research performance include research publications, invited research presentations, external research funding, and the mentoring of graduate students with consideration of their career trajectories. Levels of these metrics will be established with reference to the peer cohort. A Fisheries and Wildlife faculty member who successfully meets or exceeds expectations for promotion to full professor typically has:

**(a)** Published research articles in high-quality refereed journals at a rate comparable to their peers and aspirational peers for a period of at least four years immediately prior to consideration. Some of these articles should be co-authored with graduate students. Publications primarily should describe the results of her/his independent research program. Books, book chapters, edited or co-edited collections of articles, reviews, or awarded patents may substitute for some, but not all, of the publications. Online publications count equally with print publications, provided they appear in recognized and professionally refereed collections. For promotion to Full Professor, it is expected that the faculty member is recognized nationally or internationally for his/her research as indicated by the number of journal articles that are highly cited or have made major direct impact on management or conservation practices. Quality of papers in which the

candidate took a leadership role is more important than numbers. We value *excellent basic and applied science with relevance to conservation or management of natural resources*.

**(b)** Presented invited seminars on his/her research at national or international meetings or at peer academic institutions, and received a research award in the four-year period immediately prior to consideration;

**(c)** Maintained external funding at a level appropriate for long-term support of his/her independent research program for a period of at least four years immediately prior to consideration. Funding is expected to include major research grant(s) for which the candidate is principal investigator;

**(d)** Has mentored numbers of graduate students comparable or exceeding those of peers to successful completion of degrees since the award of tenure or the promotion to Associate. While mentorship of graduate students is expected, mentorship of postdoctoral fellows is seen as an indicator of a mature research program.

Successful candidates generally will have a record that approximates or exceeds these departmental expectations and benchmarks as presented in the appendix. In rare cases, should the candidate fall *significantly* short in a single area, other compensatory measures could substitute in demonstrating qualification for promotion. In addition to these metrics, evidence of the impact and national and international recognition of the candidate's research in the form of external assessments, reviews, citations, or awards, is essential.

### 5.6.3 Cooperative extension

Research and teaching expectations for Extension Specialists will be set as negotiated during initial appointment or annual re-adjustment of position expectations.

Standard metrics used to measure extension performance include number of peer-reviewed extension bulletins, workshops, short-courses, and grants and contracts.

On the basis of client evaluations, peer reviews, awards, and participation in workshops and short-courses related to cooperative extension, the candidate must demonstrate effectiveness in developing and delivering research-based educational programs to a well-defined off-campus audience or client base.

A Fisheries and Wildlife faculty member who successfully meets or exceeds expectations for promotion to Professor will demonstrate a national reputation and typically has:

**(a)** Maintained a steady output of publications comparable to his/her peers and aspirational peers for a period of at least four years immediately prior to consideration. These publications should at least in part describe the results of her/his independent research program. Books, book chapters, journal articles, edited or co-edited collections of articles, reviews, or awarded patents may substitute for some, but not all, of the publications. Online publications count equally with print publications, provided they appear in recognized and professionally refereed collections;

(b) Presented numerous invited seminars on his/her extension activities at nationally recognized meetings or peer academic institutions.

#### 5.6.4 Engagement

Successful candidates for tenure and/or promotion to Professor are expected to demonstrate a strong leadership role in their service. Service can be interpreted broadly to mean participation in activities that contribute to the life of the department, the University, the discipline, and society. Candidates are expected to have contributed to improving the departmental environment, through support to untenured faculty, efforts to create a more diverse and welcoming department, and effective service as chair of departmental, college, or university committees.

Traditional methods of evaluating scholarly faculty productivity (grants and scholarly publication) may not be adequate for evaluating scholarly engagement. Engagement in the form of university-community collaboration is recognized as important faculty work. Engagement cuts across and is embedded in all missions of the University.

We expect all candidates for promotion to Professor to demonstrate relationships with communities and partners that are appropriate for the scholarly exchange of ideas relevant to his/her expertise. This may be demonstrated by patents, participation in continuing education, in-service training of cooperative extension agents, regional, national or international research or development committees, commission, or centers, international education, service learning and experiential education, and scholarly publication in outlets not typically read by the candidate's peers. Publications are expected to be peer-reviewed; however, we recognize that this scholarship involves non-traditional modes of peer review, including review by partners, clients, and multi- or inter-disciplinary professionals.

The department seeks a climate welcoming to all, and it is expected that candidates for Full Professor will recognize and demonstrate the importance of inclusion and diversity in all aspects of their program. The dossier may reflect this by developing a diverse research laboratory group, implementing inclusive pedagogy in the classroom, professional engagement that promotes inclusion and diversity and involvement with other units on campus that enhance inclusion and diversity.

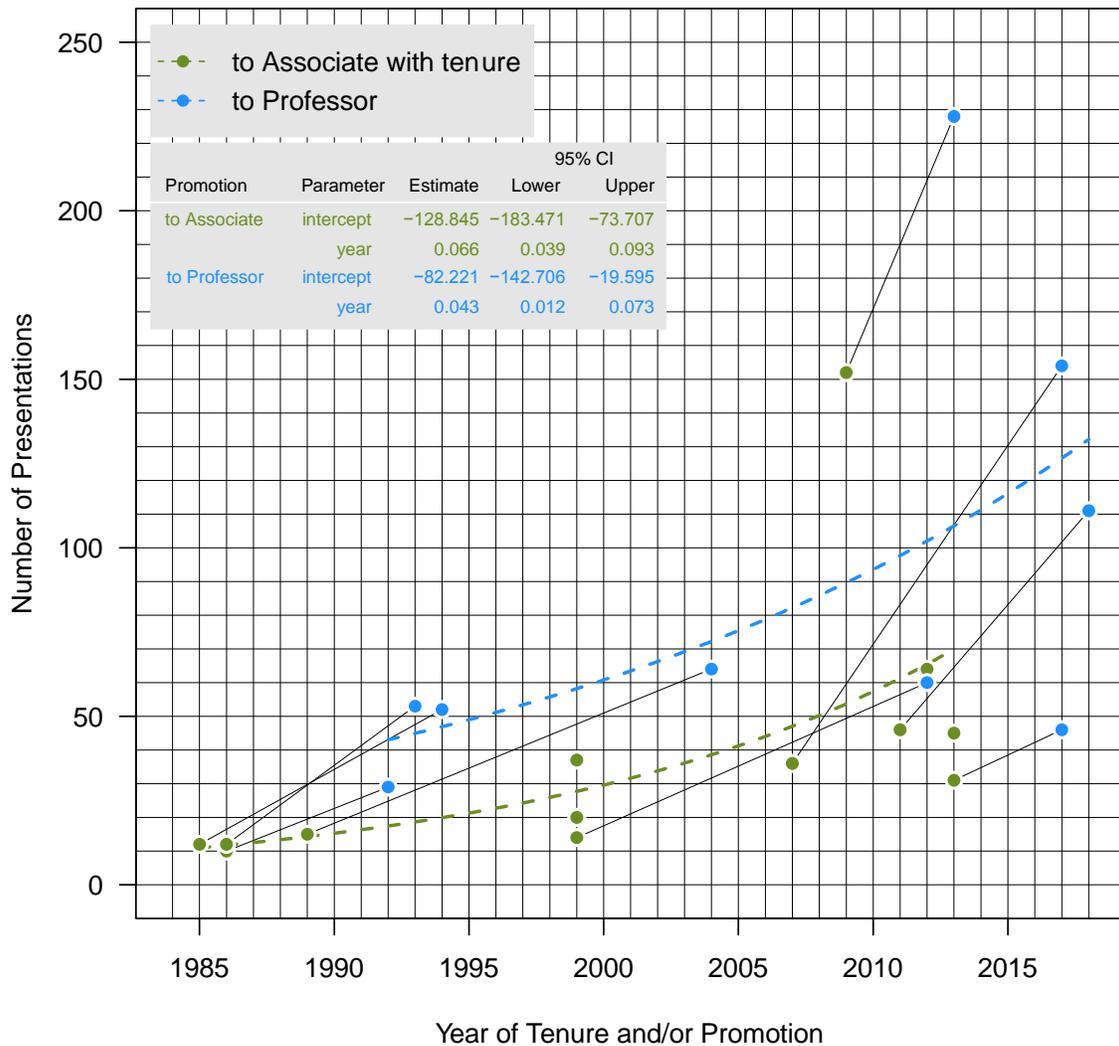
#### 5.7 Award of tenure to candidates for whom an initial appointment was at Professor

A strong dossier for tenure will approximate the criteria applied to the period of university service for the rank of Full Professor as described above.

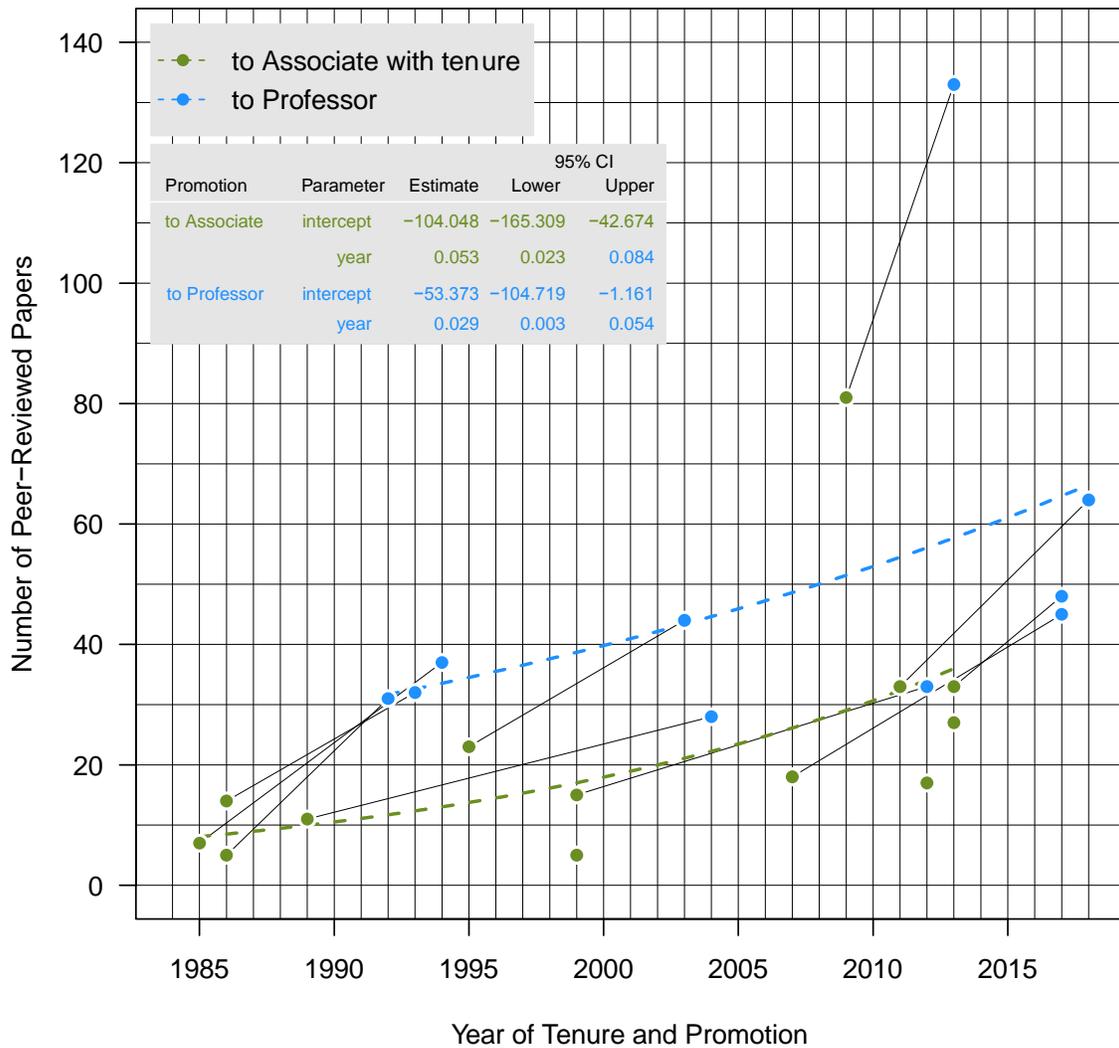
## APPENDIX A. Metrics for department faculty previously receiving promotion to Associate Professor and tenure and promotion to Professor.

The information presented in the figures below are for 14 and 11 faculty that have been promoted to Associate Professor with Tenure and Professor, respectively, over the past 24 years. The information was derived directly from the dossiers submitted to the Department of Fish and Wildlife Conservation Promotion and Tenure Committee or from information provided by individual faculty members. Therefore, the numbers relate to conditions when the faculty member requested promotion, usually in the fall of the academic year before promotion. Numbers are cumulative from Associate Professor to Professor. For example, if a faculty member reported 10 presentations when requesting promotion to Associate with tenure and then made 10 more presentations before they requested promotion to Professor, the number of presentations when requesting promotion to Professor would be 20.

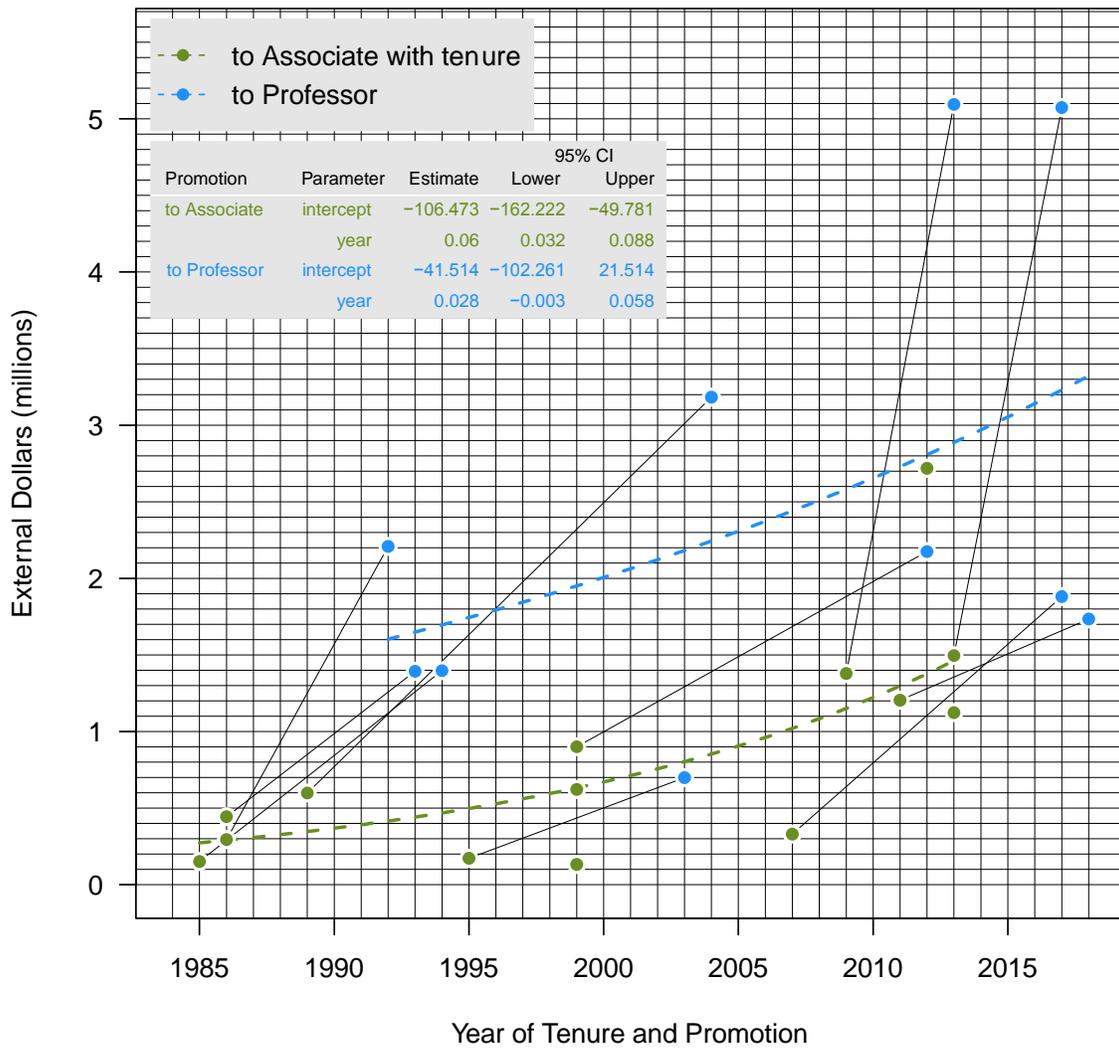
Because number of presentations, number of peer-reviewed papers, and total external award dollars at the time of request for consideration for promotion were a function of year of promotion, negative binomial models are fit to these data to illustrate temporal trends. Negative binomial models were used because the data exhibited a great deal of overdispersion.



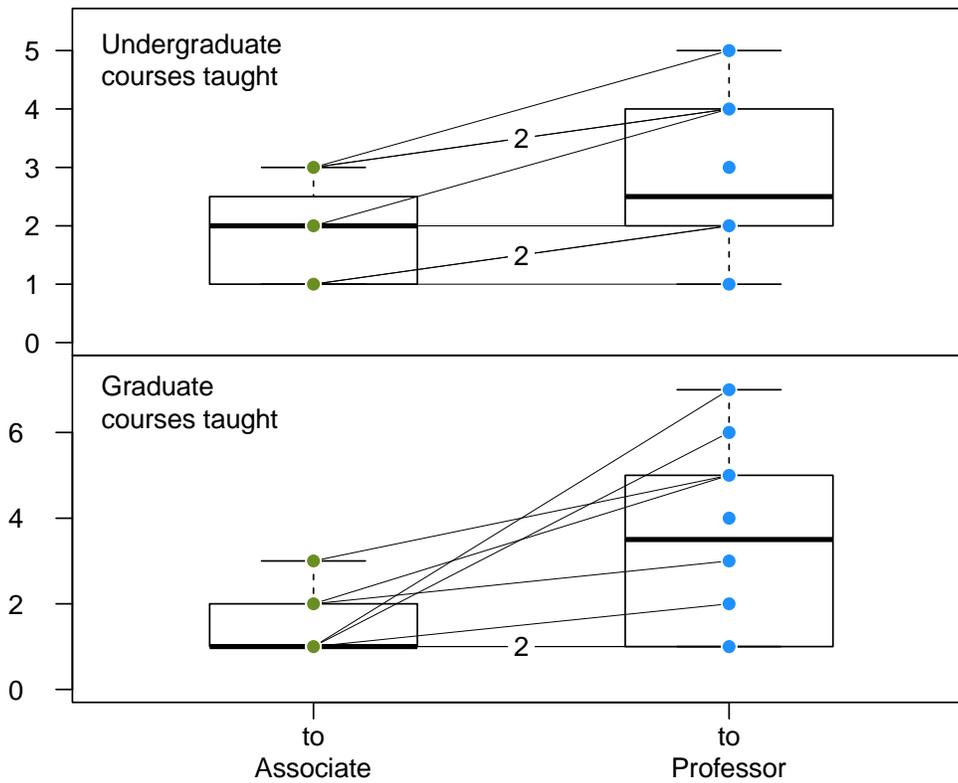
Relationships between cumulative number of presentations made at professional meetings at the time of consideration for promotion (including as presenter, as co-author and as talks or as posters) and year of promotion to Associate Professor with tenure and year of promotion to Professor. Dashed lines and shaded envelopes indicate the fit and 95% confidence intervals around negative binomial models. Parameter estimates and 95% confidence intervals for model parameters are given in the inset table. Lines trace the trajectory of individual faculty from Associate Professor to Professor.



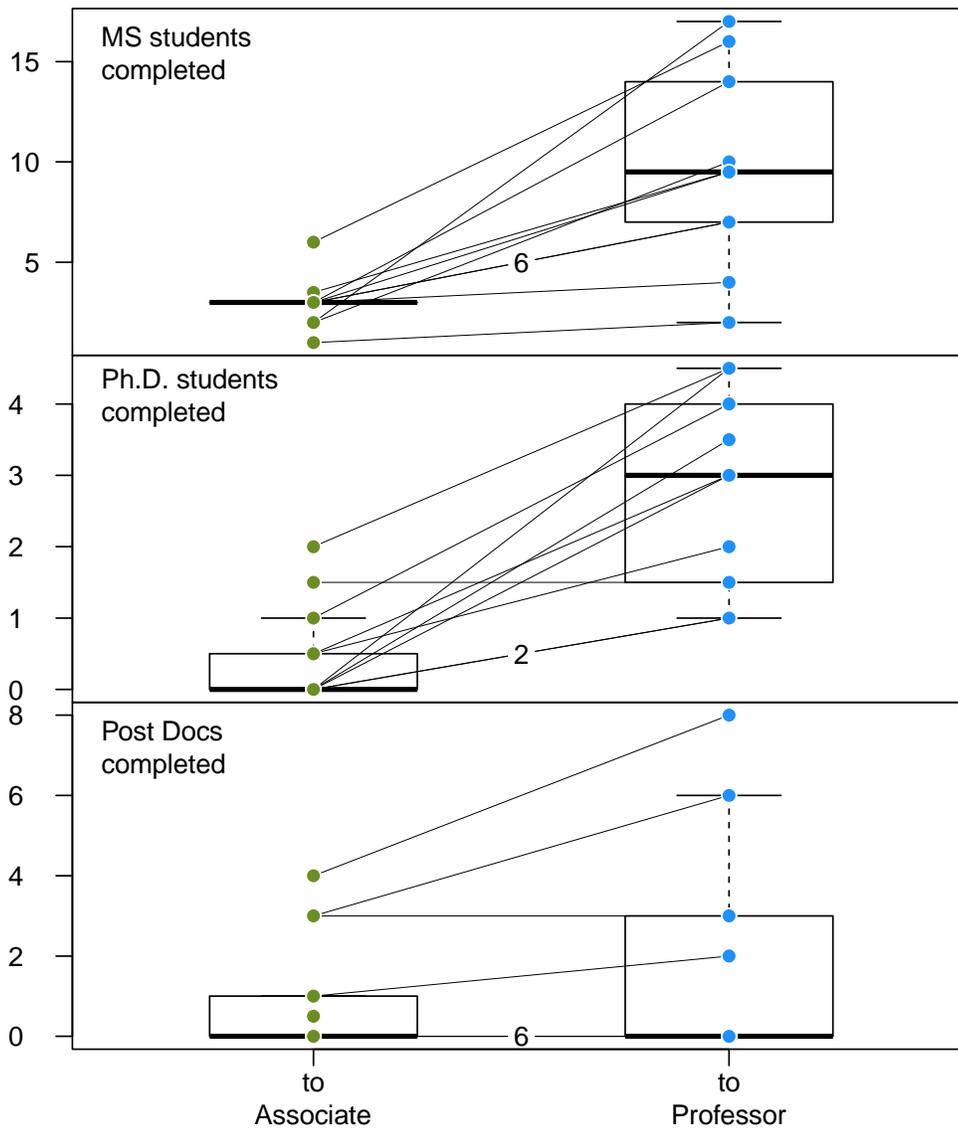
Relationships between cumulative number of peer-reviewed papers published in the scientific literature at the time of consideration for promotion (as author or co-author exclusive of book chapters and conference proceedings) and year of promotion to Associate Professor with tenure and year of promotion to Professor. Dashed lines and shaded envelopes indicate the fit and 95% confidence intervals around negative binomial models. Parameter estimates and 95% confidence intervals for model parameters are given in the inset table. Lines trace the trajectory of individual faculty from Associate Professor to Professor.



Relationships between cumulative external dollars awarded at the time of consideration for promotion (exclusive of internal awards) and year of promotion to Associate Professor with tenure and year of promotion to Professor. Dashed lines and shaded envelopes indicate the fit and 95% confidence intervals around negative binomial models. Parameter estimates and 95% confidence intervals for model parameters are given in the inset table. Solid black lines trace the trajectory of individual faculty from Associate Professor to Professor.



Box and whisker plot of the number of different undergraduate and graduate courses that a faculty taught before requesting promotion to Associate Professor with tenure and promotion to Professor. The points indicate individual faculty and solid black lines trace the trajectory of individual faculty from Associate Professor to Professor. When lines tracking promotion represent more than one faculty, the lines are numbered to reflect the number of faculty exhibiting that path.



Box and whisker plot of the number of M.S. students, Ph.D. students, and post docs supervised to completion before requesting promotion to Associate Professor with tenure and promotion to Professor. The points indicate individual faculty and solid black lines trace the trajectory of individual faculty from Associate Professor to Professor. When lines tracking promotion represent more than one faculty, the lines are numbered to reflect the number of faculty exhibiting that path. The post doc category included research scientist and research professors directly supervised. Faculty co-supervising a student or post doc received 0.5 credit for that individual.

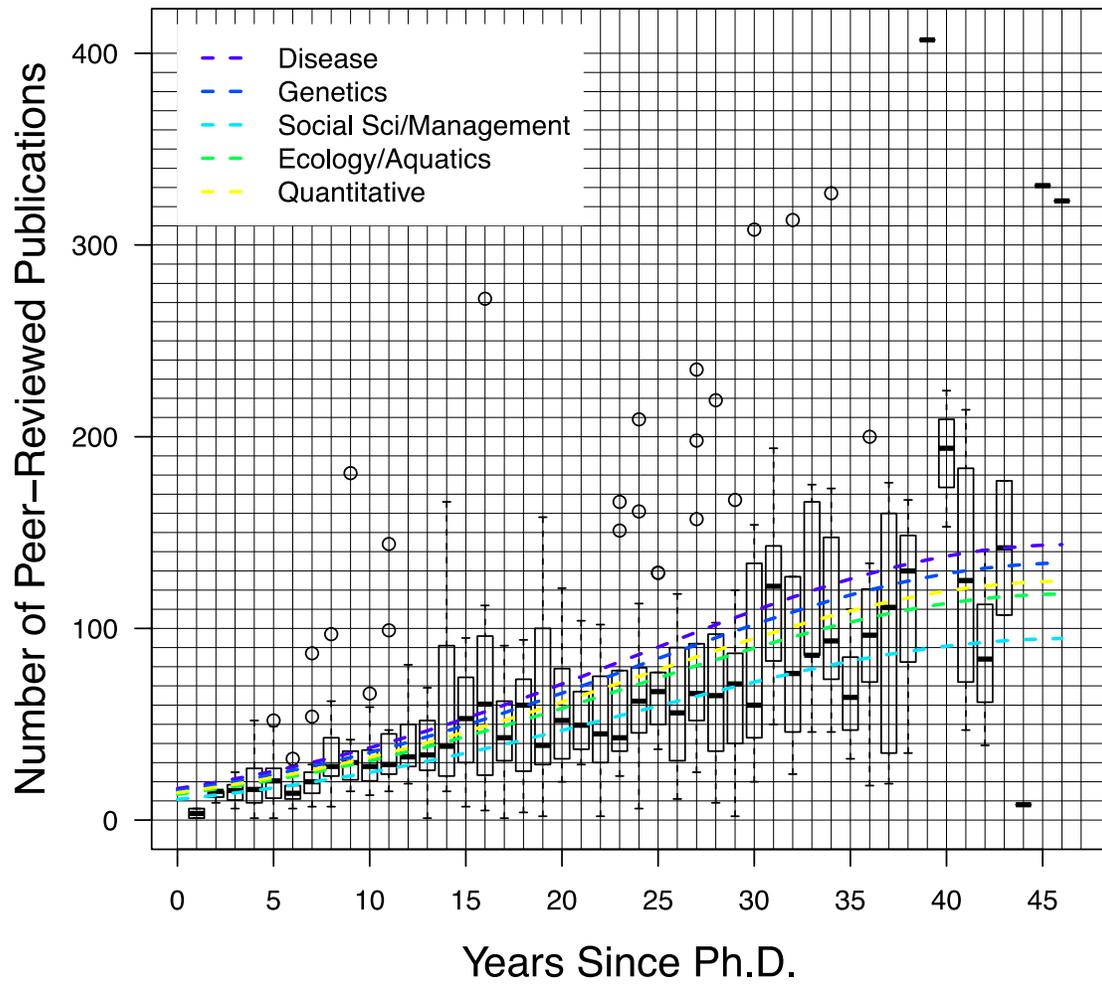
## APPENDIX B. Bibliographic metrics for peer institutions by sub-disciplines.

The figures on the following pages are meant as references for tenure-track faculty or faculty considering requesting promotion to Professor, but do not necessarily need to be included in dossiers or recommendations concerning request for tenure and promotion. We include information on the number of peer-reviewed publications, cites per year, *h*-index, and *m*-quotient. The *h*-index is defined as the number of papers that have been cited that number of times (Hirsch 2005). For example, a scientist with four papers that are cited 1, 1, 2, and 4 times, respectively, would have an *h*-index of 2. The *m* quotient is simply the *h*-index divided by the number of years since the Ph.D. was awarded (i.e., average annual increase in *h*-index). All data are from Swihart et al. (2016). The predicted means for five disciplines are shown as colored lines on each graph. For modeling purposes a lag (defined as the number of years before the Ph.D. that the first paper was published) of 3.8 years was used. All models included “conservation science” because all members of the Department of Fish and Wildlife Conservation consider themselves conservation scientists. Research effort was set at 50%. Models for ecologists and aquatic scientists, and for social scientists and managers, were combined because of their similar predictions. Because sex influenced the number of publications produced by faculty (Swihart et al. 2016), separate graphs for females and males are presented.

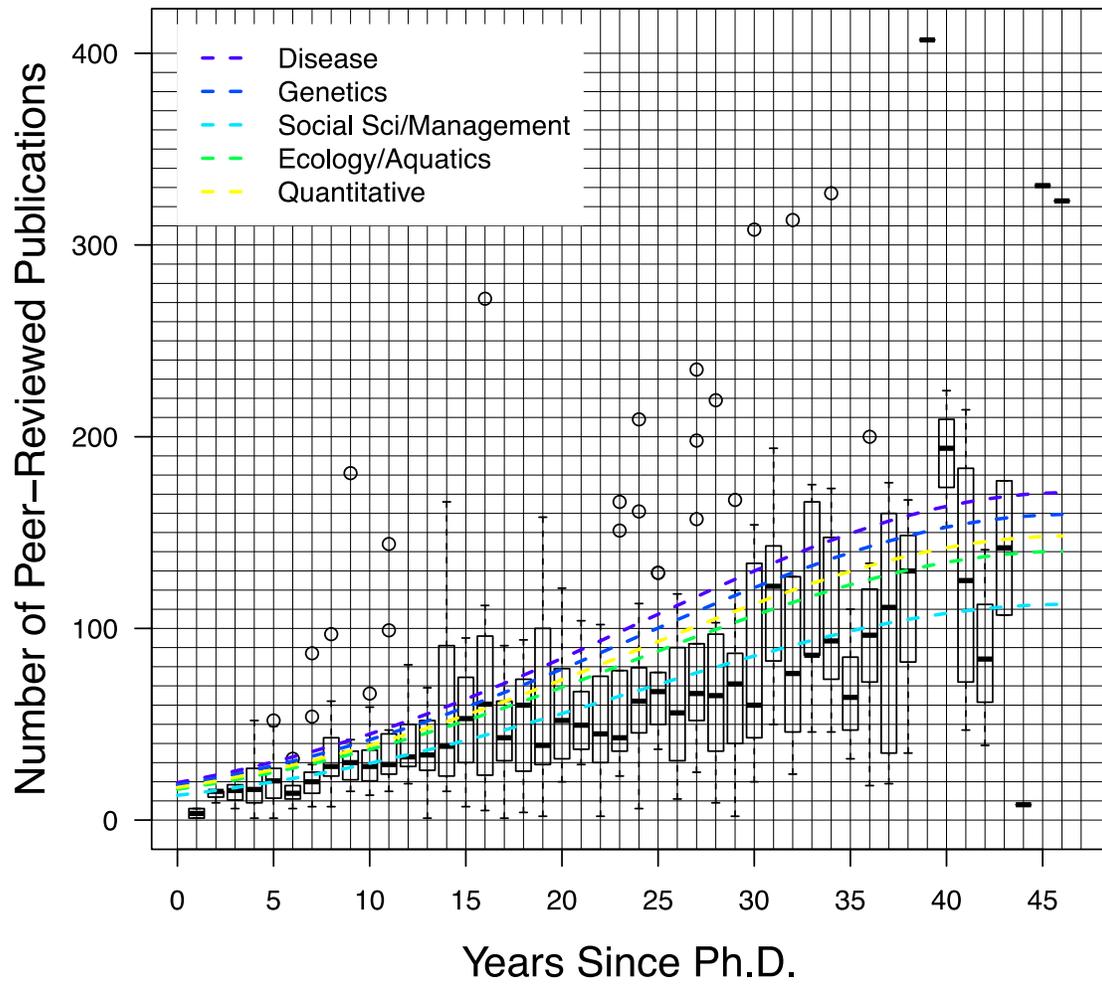
### Literature cited

Hirsch, J. E. 2005. An index to quantify an individual’s scientific research output. Proceedings of the National Academy of Sciences, USA 102:16569–16572.

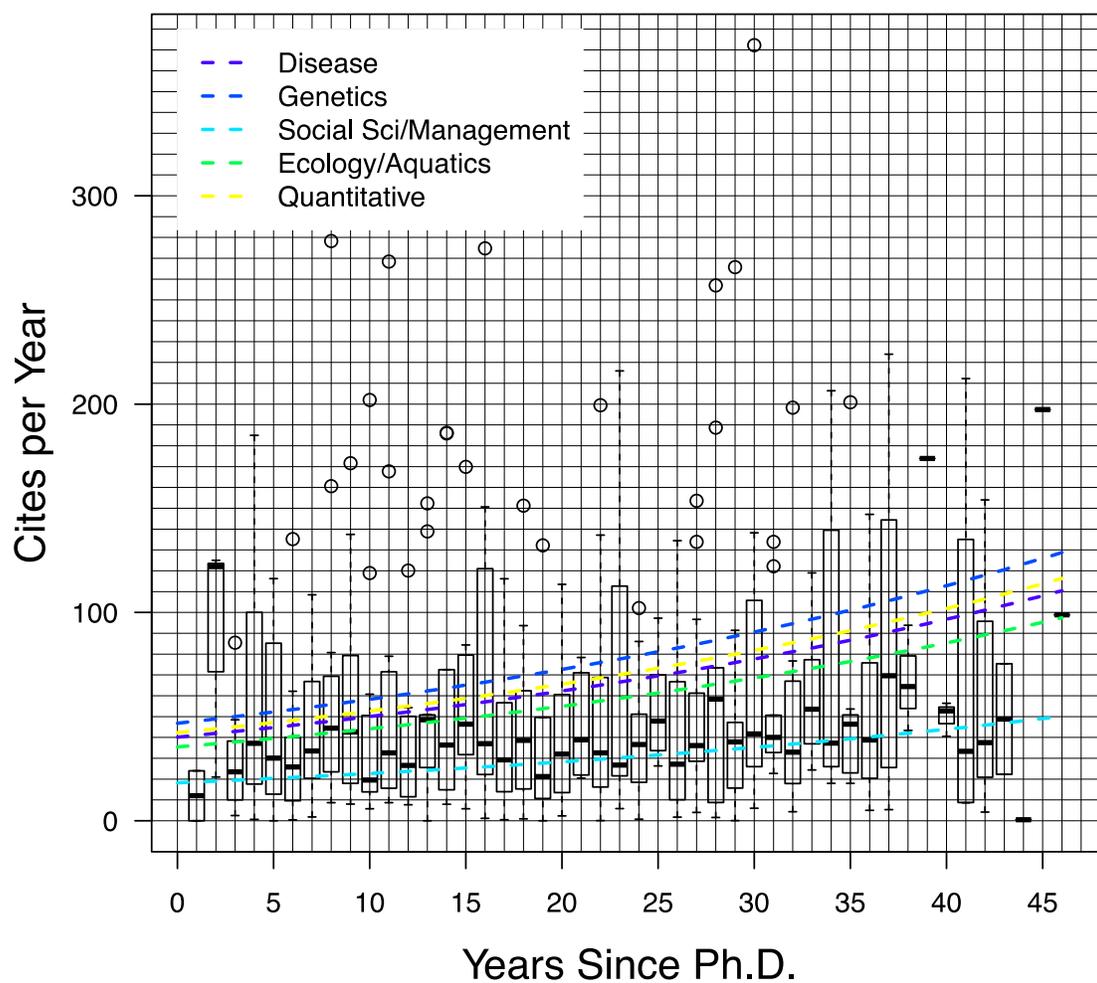
Swihart RK, Sundaram M, Hook TO, DeWoody JA. 2016. Predictors of scholarly productivity and impact by faculty in fisheries and wildlife: a bibliometric analysis. J Wildl Manage 80:563-572.



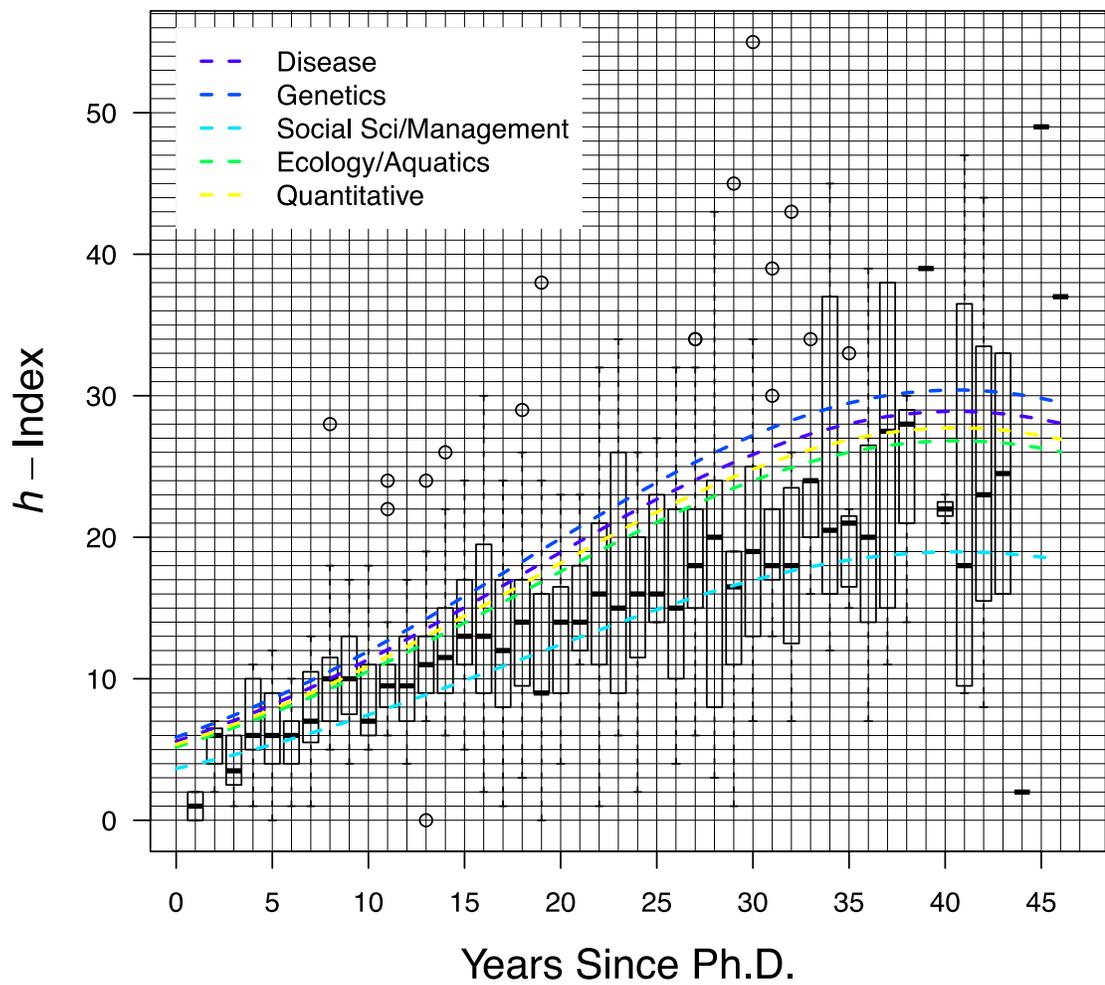
Box and whisker plot of the number of peer-reviewed publication as a function of years since the Ph.D. for 93 female fish and wildlife faculty.



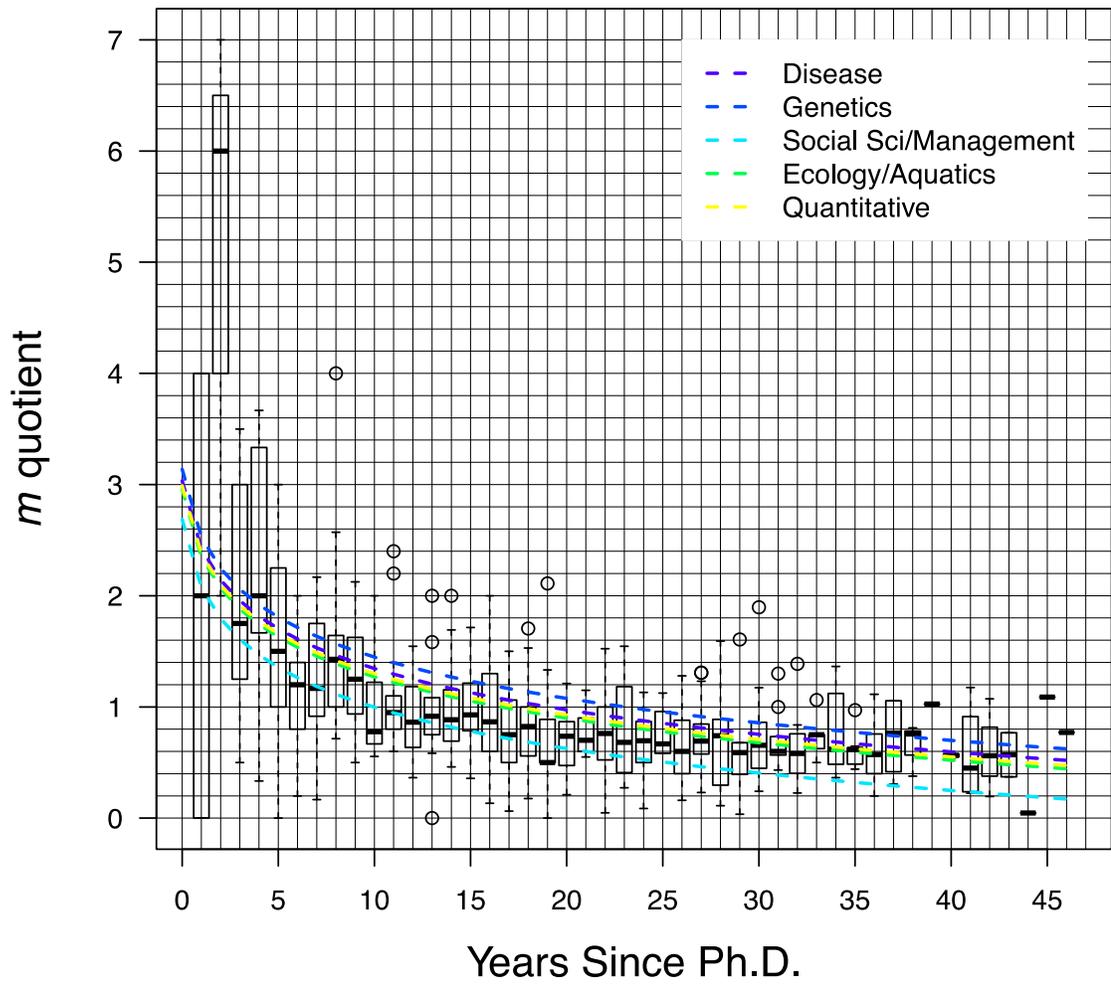
Box and whisker plot of the number of peer-reviewed publication as a function of years since the Ph.D. for 344 male fish and wildlife faculty.



Box and whisker plot of citations per year for 437 fish and wildlife faculty as a function of years since the Ph.D.



Box and whisker plot of the  $h$ -index for 437 fish and wildlife faculty as a function of years since the Ph.D.



Box and whisker plot of the  $m$  quotient (i.e., annual rate of increase in  $h$ -index) for 437 fish and wildlife faculty as a function of years since the Ph.D.