

Zeitschrift: Veröffentlichungen des Geobotanischen Institutes der Eidg. Tech. Hochschule, Stiftung Rübel, in Zürich

Herausgeber: Geobotanisches Institut, Stiftung Rübel (Zürich)

Band: 94 (1989)

Artikel: The impact of draining, burning and fertilizer treatments on the nutrient status of floating "Typha" mats in a freshwater marsh = Der Einfluss der Drainage, kontrolliertem Abbrennen und Düngung auf die Nährstoffverhältnisse in schwimmenden "Typha"-Beständen

Autor: Krüsi, Bertil O.

Register: List of figures

DOI: <https://doi.org/10.5169/seals-308910>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 09.12.2025

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

LIST OF FIGURES

	page
1. Location of the study area.	8
2. Aerial view of the study area.	9
3. Climatic diagram of Sackville, New Brunswick.	9
4. Temperature, rainfall and water level at the site in 1982.	10
5. Schematic profile of the floating mat in the undrained basin.	11
6. Experimental design.	13
7. Definitions of assimilation period and duration of senescence.	16
8. General phenological development of <u>Typha glauca</u> during 1982 on unburned and unfertilized plots in the undrained basin.	21
9. Development of the shoot density of <u>Typha glauca</u> on unburned and burned plots in the undrained basin, on which were superimposed five fertilizer treatments.	26
10. Development of the shoot density of <u>Typha glauca</u> on unburned and burned plots in the drained basin, on which were superimposed five fertilizer treatments.	27
11. Shoot density on June 19 and final shoot density of <u>Typha glauca</u> under different draining, burning and fertilizer treatments.	28
12. Shoot density of <u>Typha glauca</u> on June 19, in percent of final density, under different draining, burning and fertilizer treatments.	29
13. Shoot density of <u>Typha glauca</u> on June 19, in percent of final density, in response to different fertilizer treatments which were superimposed on four draining x burning regimes.	30
14. Shoot height on June 19 and final shoot height of <u>Typha glauca</u> under different draining, burning and fertilizer treatments.	32
15. Development of mean total shoot height and mean height of the green shoot portion of <u>Typha glauca</u> on unburned and burned plots in the undrained basin, on which were superimposed five fertilizer treatments.	34
16. Development of mean total shoot height and mean height of the green shoot portion of <u>Typha glauca</u> on unburned and burned plots in the drained basin, on which were superimposed five fertilizer treatments.	35
17. Basal shoot circumference of <u>Typha glauca</u> under different draining, burning and fertilizer treatments.	37
18. Basal shoot circumference of <u>Typha glauca</u> in response to different fertilizer treatments which were superimposed on four draining x burning regimes.	38
19. Number of leaves per shoot of <u>Typha glauca</u> under different draining, burning and fertilizer treatments.	39
20. Number of leaves per shoot of <u>Typha glauca</u> in response to different fertilizer treatments which were superimposed on four draining x burning regimes.	40
21. Length of the assimilation periods 50% and 0% of <u>Typha glauca</u> under different draining, burning and fertilizer treatments.	42
22. Length of the assimilation periods 50% and 0% of <u>Typha glauca</u> in response to different fertilizer treatments which were superimposed on four draining x burning regimes.	43

23. Start of the assimilation periods 50% and 0% of Typha glauca under different draining, burning and fertilizer treatments. 44
24. Start of the assimilation periods 50% and 0% of Typha glauca in response to different fertilizer treatments which were superimposed on four draining x burning regimes. 46
25. Day after May 15, on which mean shoot height of Typha glauca reached 71.1 cm, that is 50% of the final height in the undrained, unburned and unfertilized treatment plots, under different draining, burning and fertilizer treatments. 48
26. Day after May 15, on which mean shoot height of Typha glauca reached 71.1 cm, that is 50% of the final height in the undrained, unburned and unfertilized treatment plots, in response to different fertilizer treatments which were superimposed on four draining x burning regimes. 49
27. Duration of senescence 50% and 100% of Typha glauca under different draining, burning and fertilizer treatments. 51
28. Duration of senescence 50% and 100% of Typha glauca, in response to different fertilizer treatments which were superimposed on four draining x burning regimes. 52
29. Height of the green shoot portion of Typha glauca on October 3, in percent of total shoot height, under different draining, burning and fertilizer treatments. 53
30. Height of the green shoot portion of Typha glauca on October 3, in percent of total shoot height, in response to different fertilizer treatments which were superimposed on four draining x burning regimes. 54
31. Susceptibility of Typha glauca to drought: Height of green parts, during June and July 1982, in the drained treatment on which were superimposed burning and fertilizer treatments. 57
32. Susceptibility of Typha glauca to drought: Leaf die-back on June 19, under different draining, burning and fertilizer treatments. 58
33. Susceptibility of Typha glauca to drought: Leaf die-back on June 19 in the drained basin, in response to different fertilizer treatments which were superimposed on two burning regimes. 59
34. Insect damage: Percentage of Typha glauca shoots attacked by stem-boring insect larvae, under different draining, burning and fertilizer treatments. 62
35. Insect damage: Percentage of Typha glauca shoots attacked by stem-boring insect larvae, in response to different fertilizer treatments which were superimposed on four draining x burning regimes. 63
36. Shoot standing crop of Typha glauca as predicted from mean shoot height and mean shoot density (contour plot). 64
37. Shoot standing crop of Typha glauca under different draining, burning and fertilizer treatments. 65
38. Shoot standing crop of Typha glauca in response to different fertilizer treatments which were superimposed on four draining x burning regimes. 66
39. Aboveground standing crop of plants other than Typha under two different fertilizer treatments which were superimposed on four draining x burning regimes. 69
40. Litter load under two different fertilizer treatments which were superimposed on four draining x burning regimes. 70