

Bryophytes

Life history



r and K selection

- Difficult to consider bryophyte r and K strategists in the same way as that of seed plants
- Bryophytes can revert, growing from a fragment into an adult, or growing from a broken tissue of a fragment into a protonema → juvenile → immature individual → reproductive individual.
- within bryophytes, both ends of the continuum exist, but most species have a mix of characters.



Crowded *Funaria hygrometrica* with its abundant capsules.

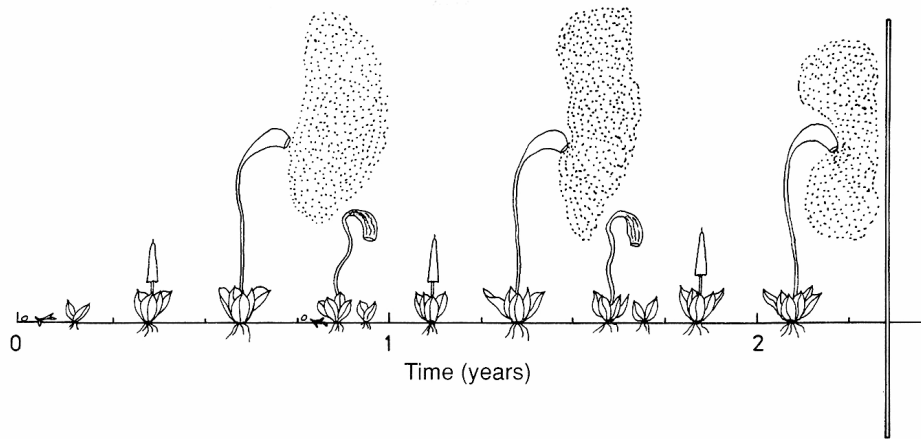
r-strategist

rely on large numbers of small spores and a short life cycle (opportunists).



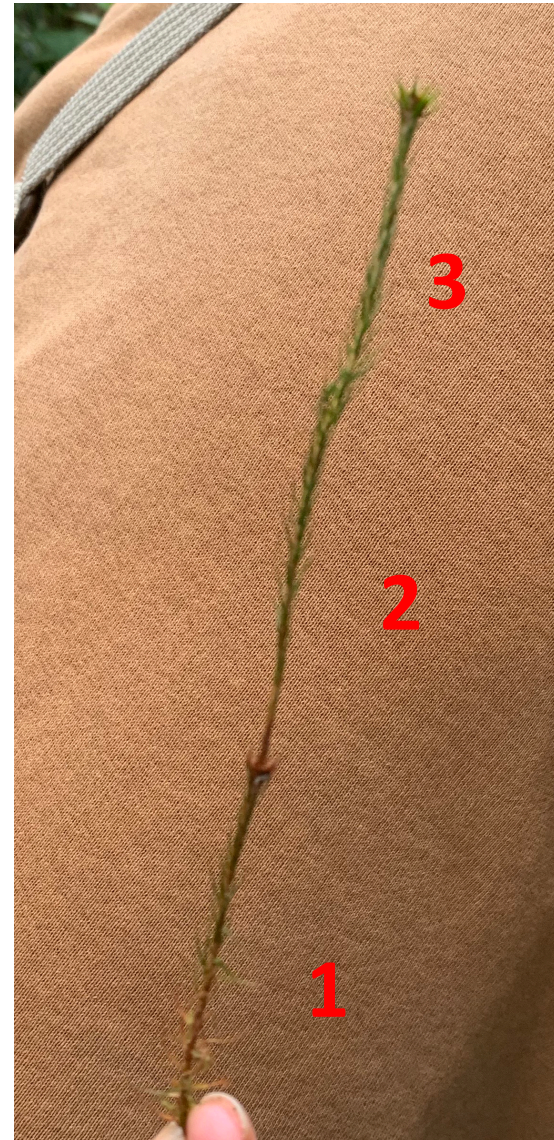
Ephemenum serratum

FUGUTIVES



highly unpredictable habitat that exists for a short time

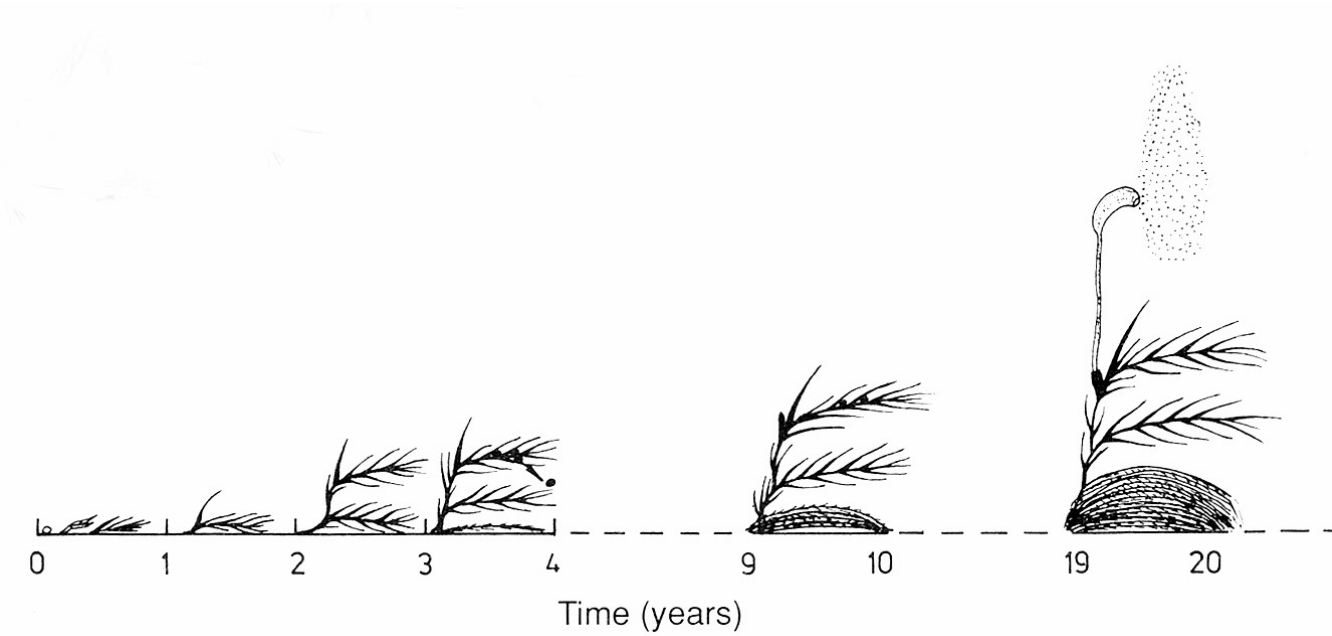
Funaria hygrometrica



K-strategist

rely on their clonal, perennial growth (perennial stayers) and often have only limited sexual reproduction or are strictly vegetative.

PERENNIAL- stayer (competitive)



species that require stable environments
where end of habitat is predictable

Brachythecium rutabulum

Bet hedgers

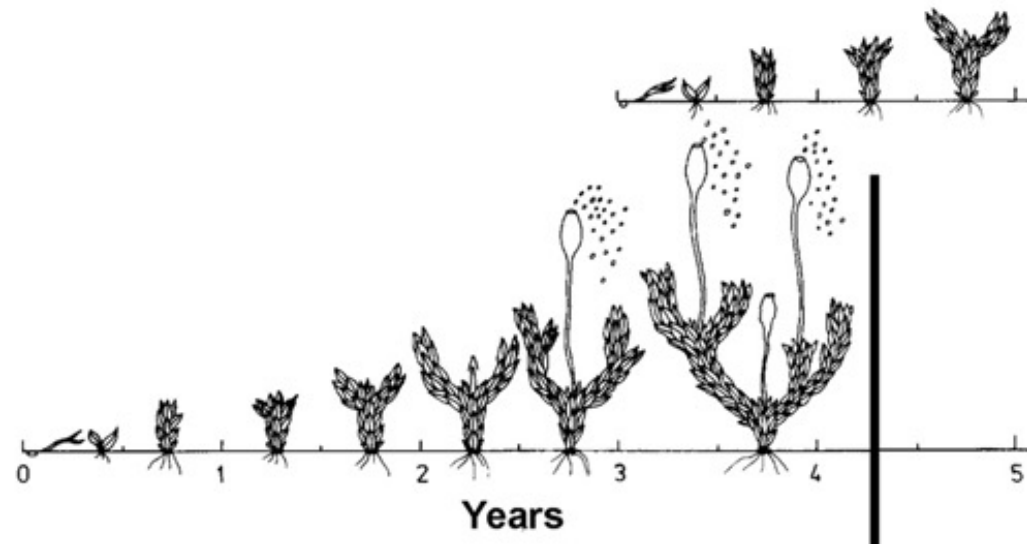
most bryophytes lie somewhere on the bet hedger line, producing spores sexually, but using fragments and asexual propagules during seasons when energy is not needed for sexual reproduction or spore production



Syrrhopodon texanus



SHUTTLES - Short-lived



species that don't avoid periods of severe stress;
habitat lasts 2-3 years

Splachnun, Tetrapodon