

HODNOCENÍ ZDRAVOTNÍHO STAVU A PROVOZNÍ BEZPEČNOSTI STROMŮ 4

Luděk Praus

Ústav nauky o dřevě,
LDF MENDELU v Brně



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

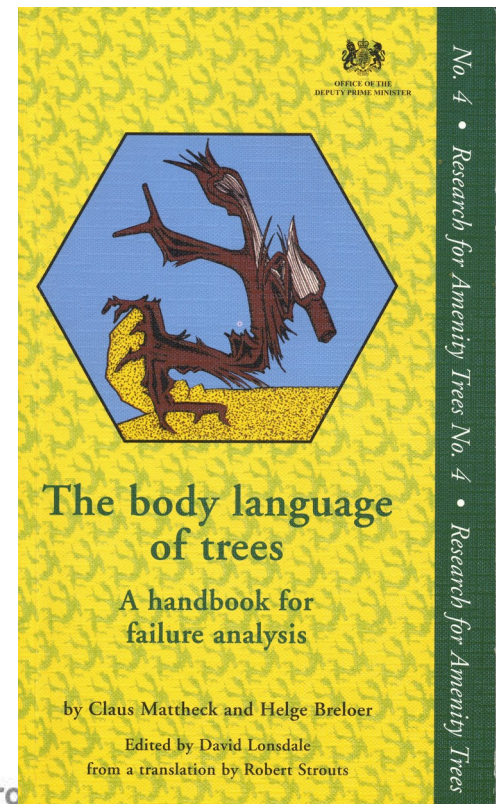
INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Tento projekt je spolufinancován Evropským sociálním fondem a Státním rozpočtem ČR InoBio –
CZ.1.07/2.2.00/28.0018

Vizuální hodnocení stromů

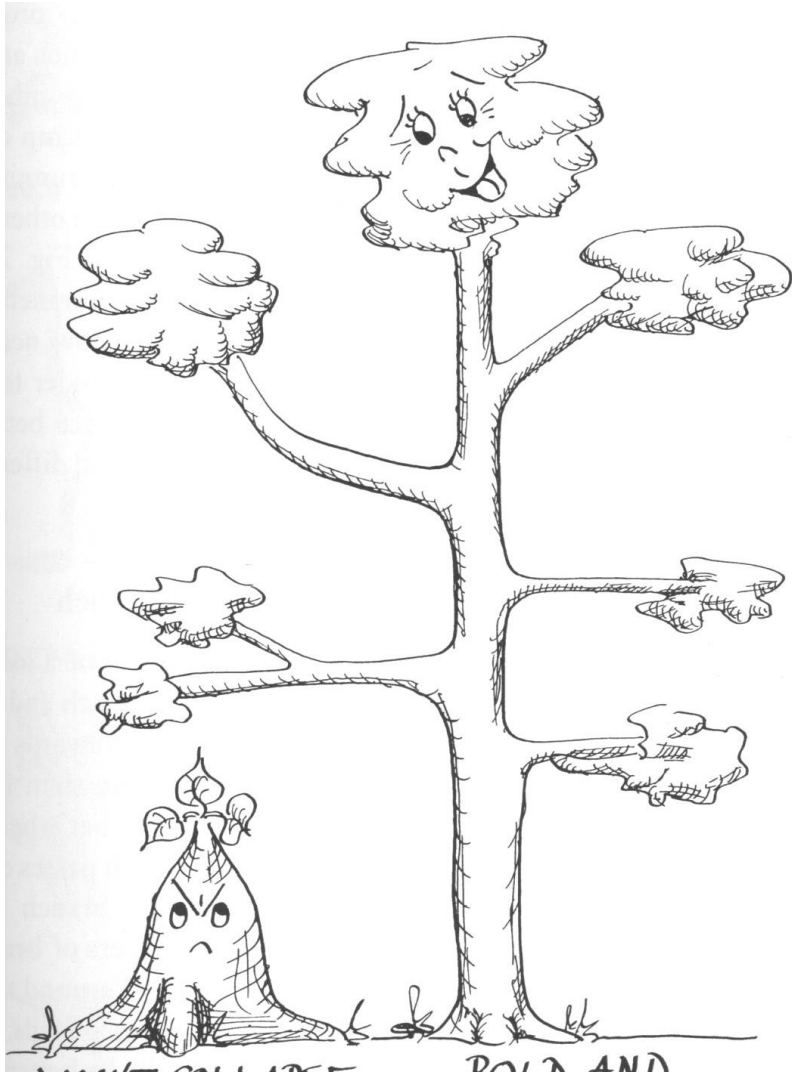
VTA

- autor Claus Mattheck a spol.
- **The Body Language of Trees.**
- Je založena na poznání vnějších projevů reakce stromu na vnitřní defekty
- Pracuje s axiomem konstantního napětí
- Strom na zatížení reaguje adaptivním růstem



VTA metoda

- VTA **se soustředí na geometrii stromu.**
- První krok je **vizuální kontrola.**
- V případě defektu je měřena zbytková nosnost.
- K tomu se používají typicky přístroje zvané penetrometry (např. *Resistograph*) nebo *Fractometer*.



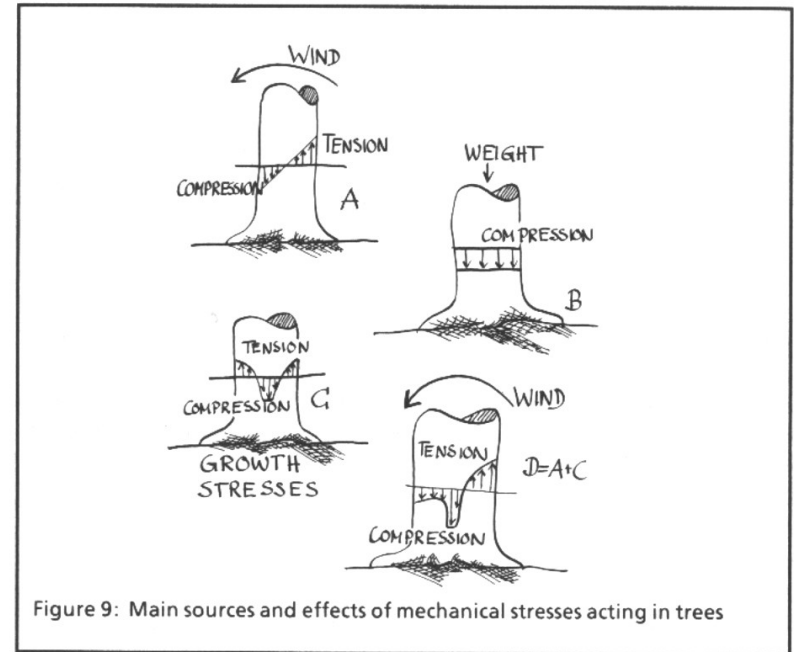
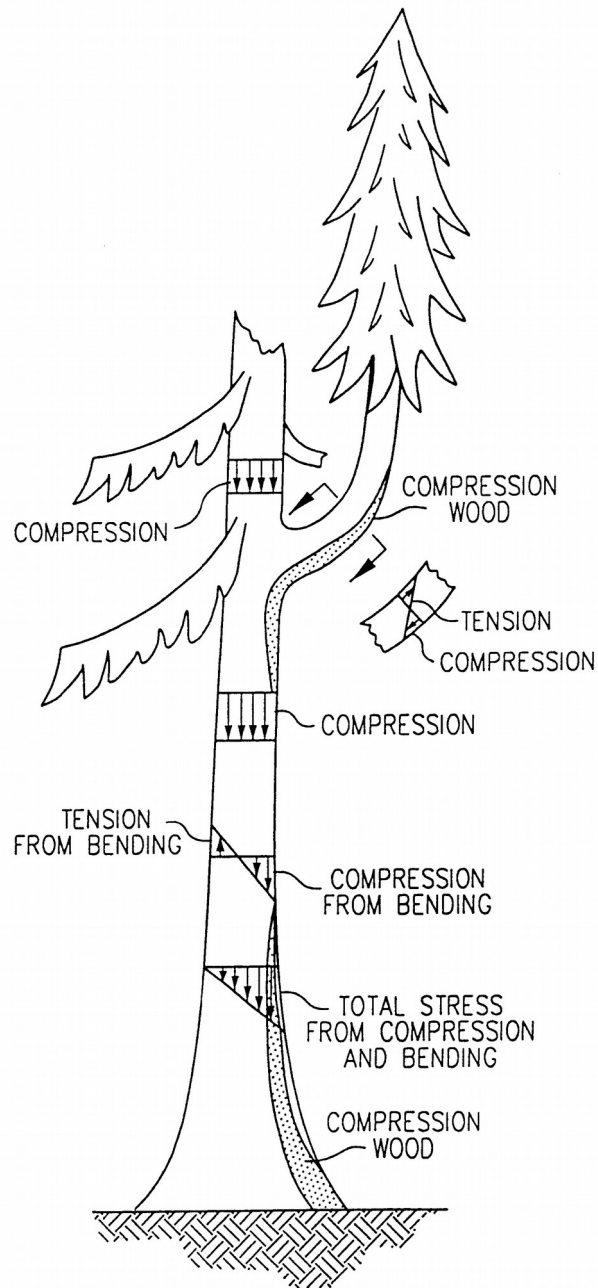
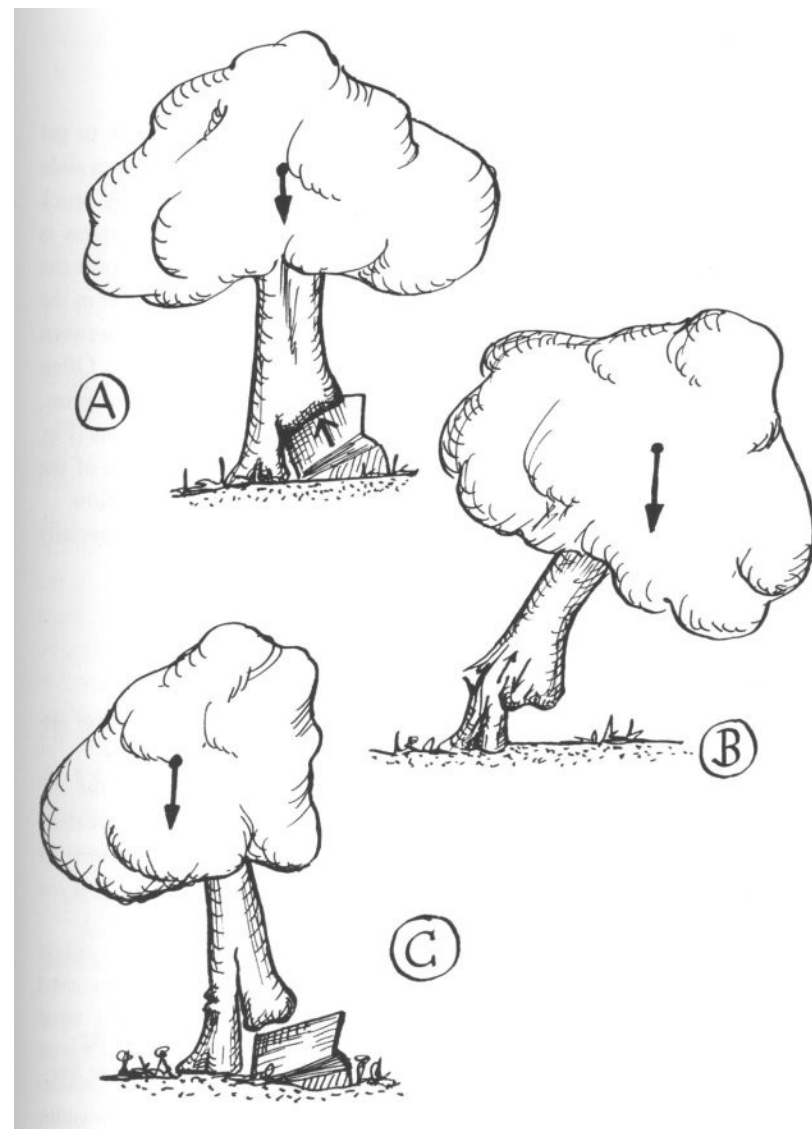
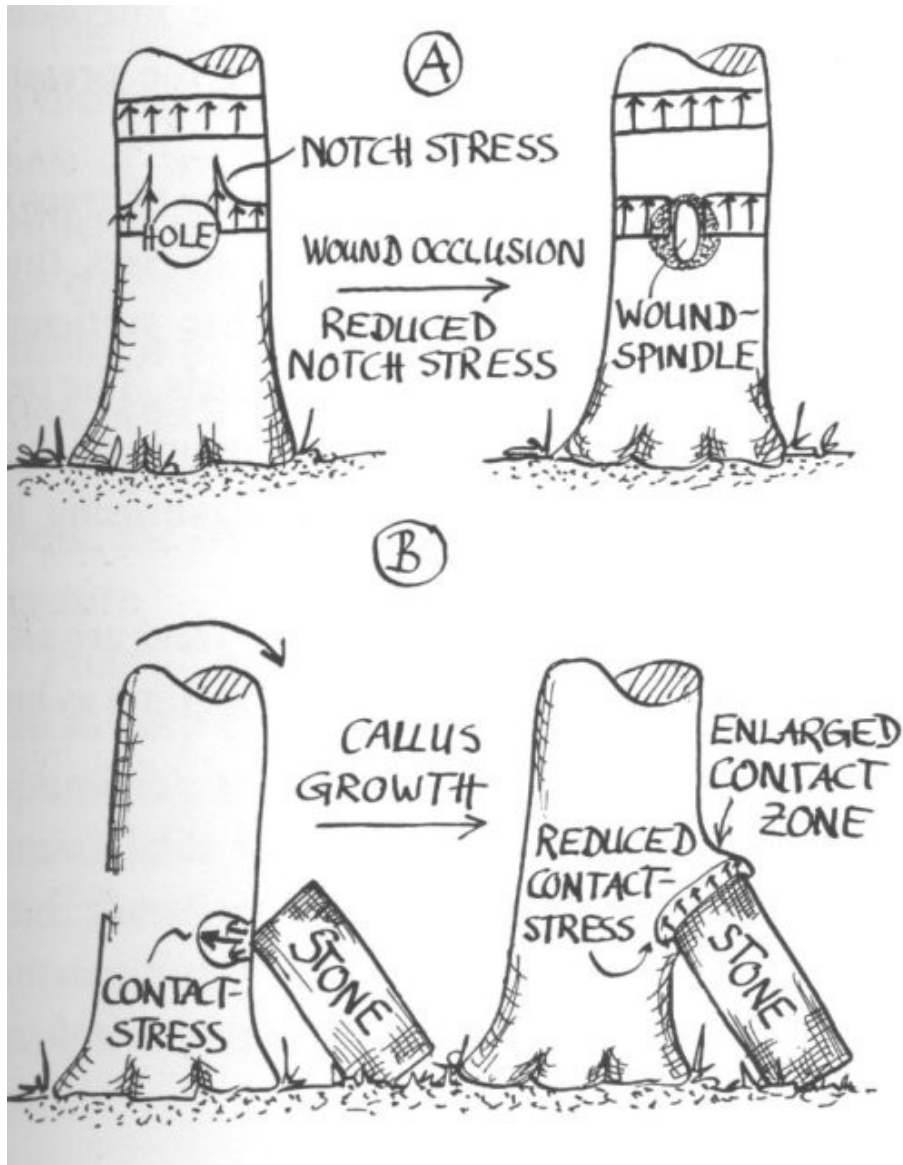


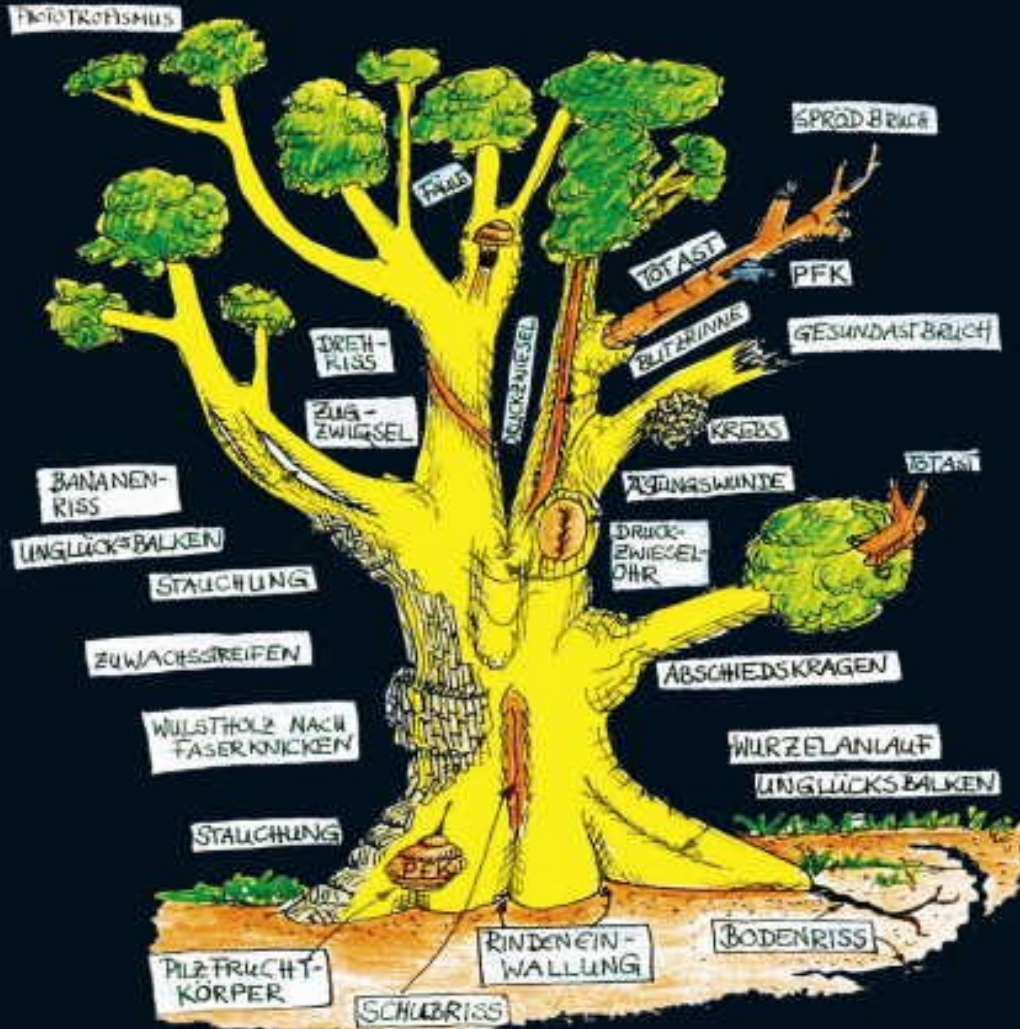
Figure 9: Main sources and effects of mechanical stresses acting in trees



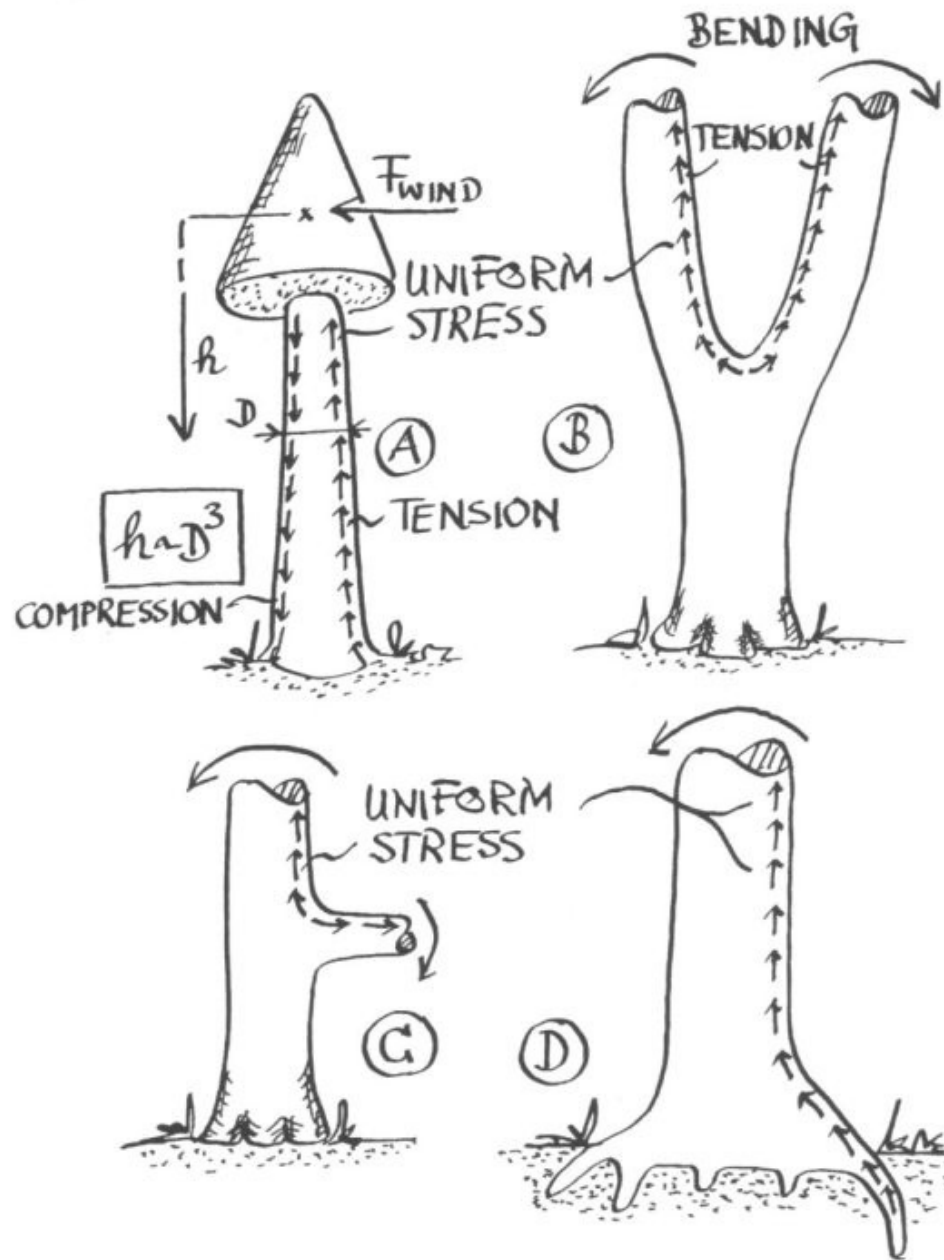
C. Mattheck

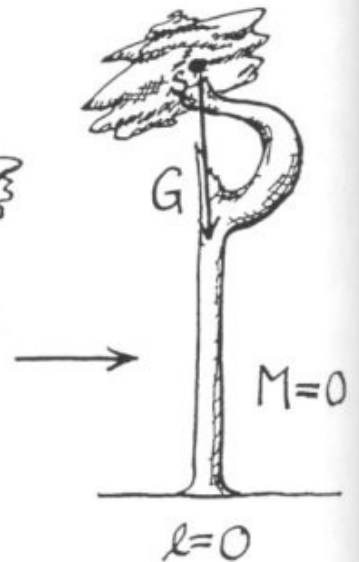
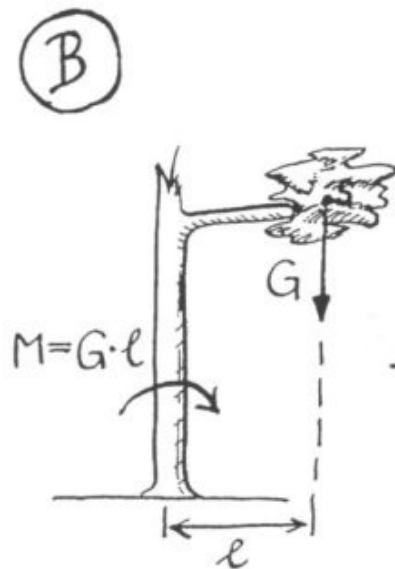
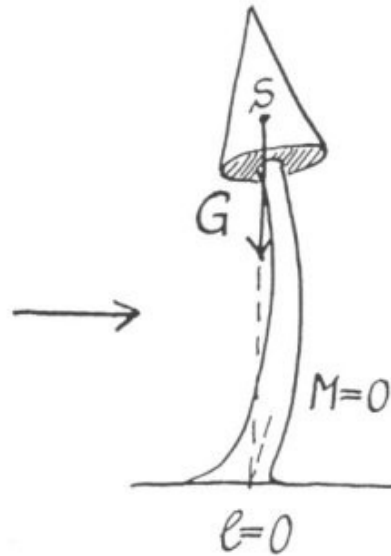
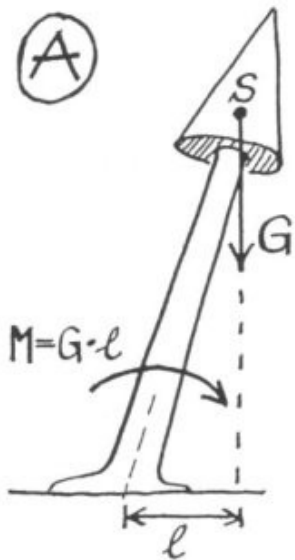
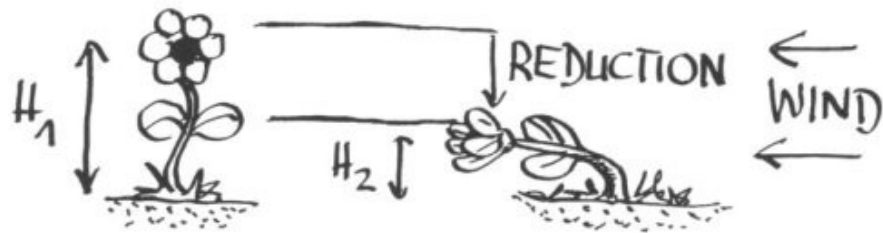
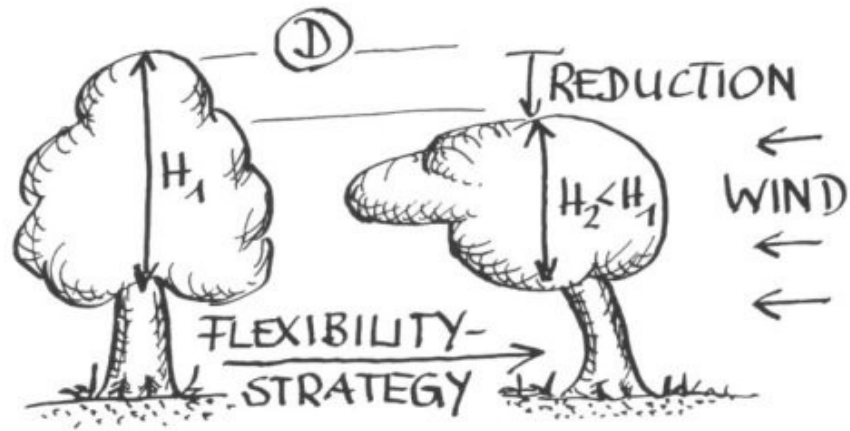
Aktualisierte

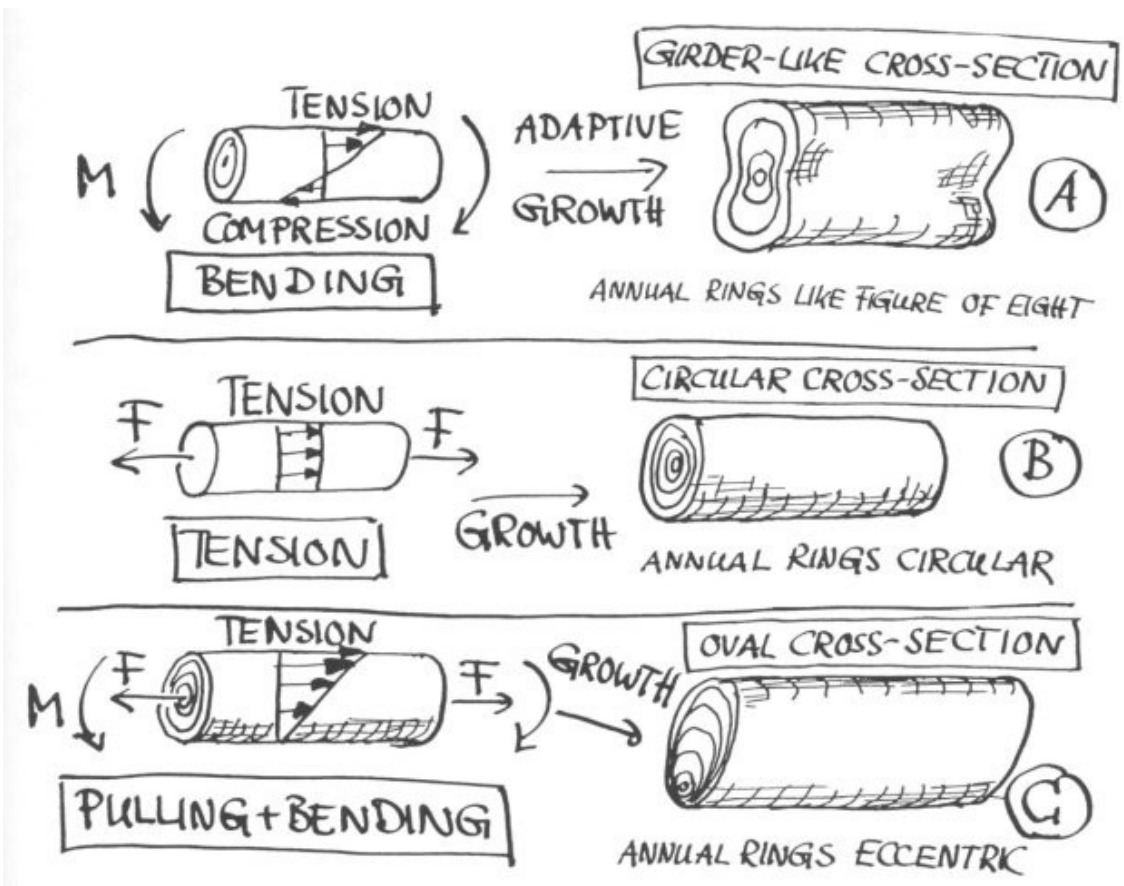
Feldanleitung für Baumkontrollen

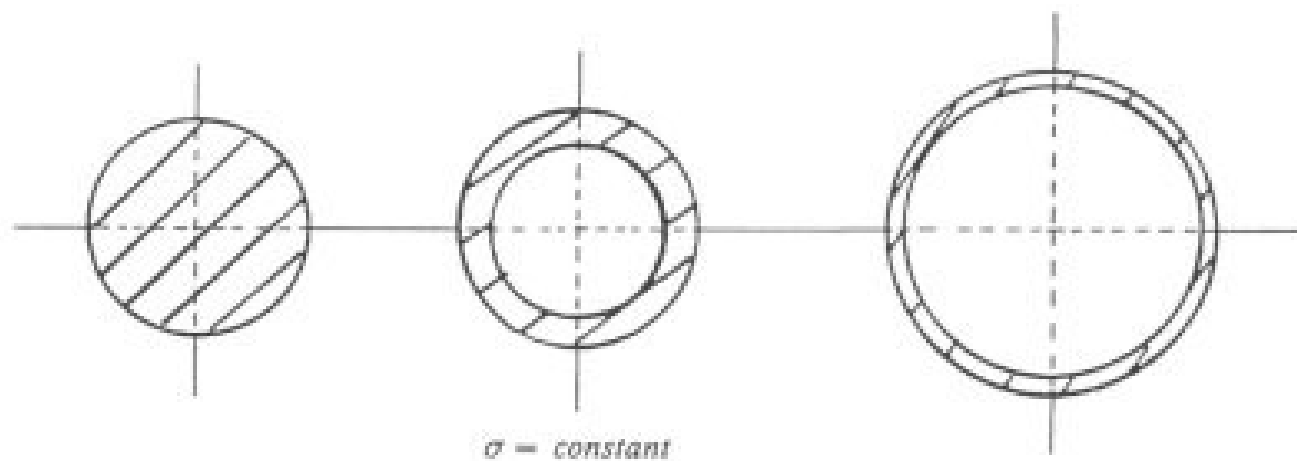


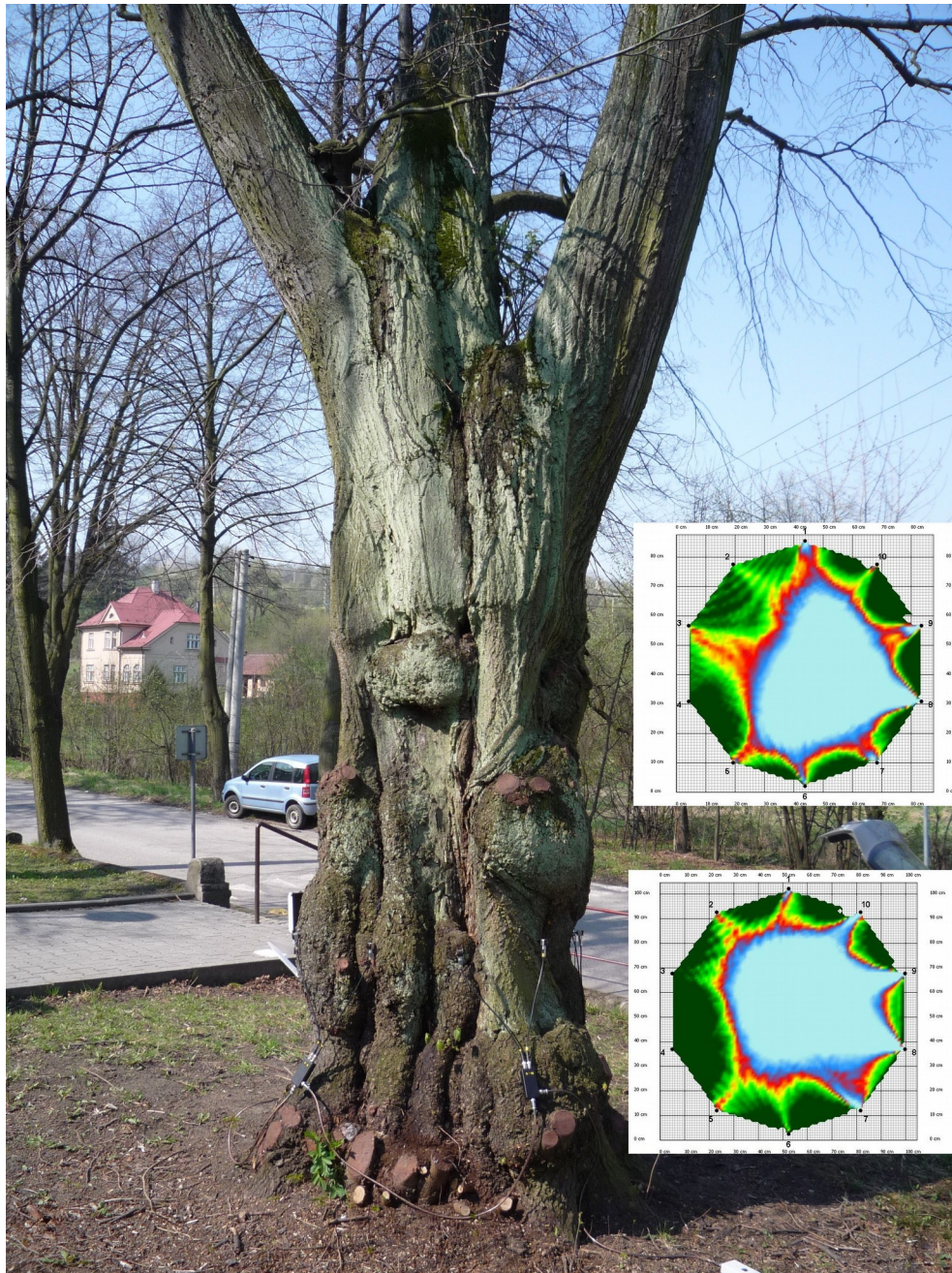
mit Visual Tree Assessment



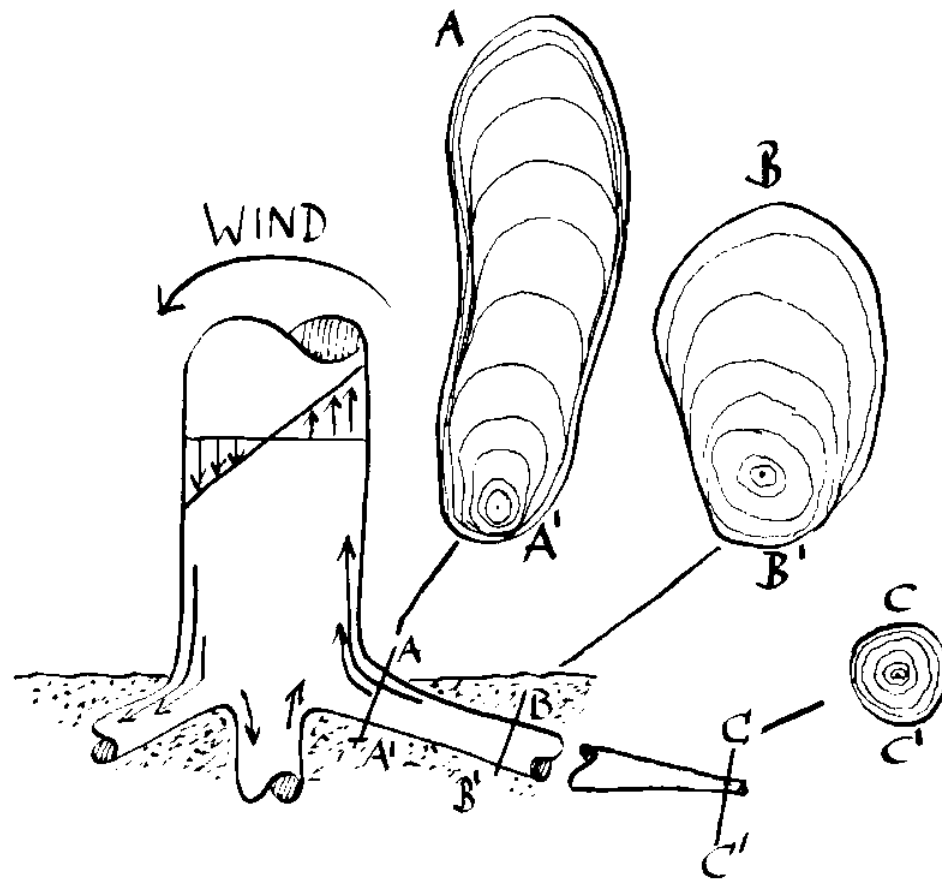








Tento projekt je spolufinancován Evropským sociálním fondem a Státním rozpočtem ČR InoBio – CZ.1.07/2.2.00/28.0018



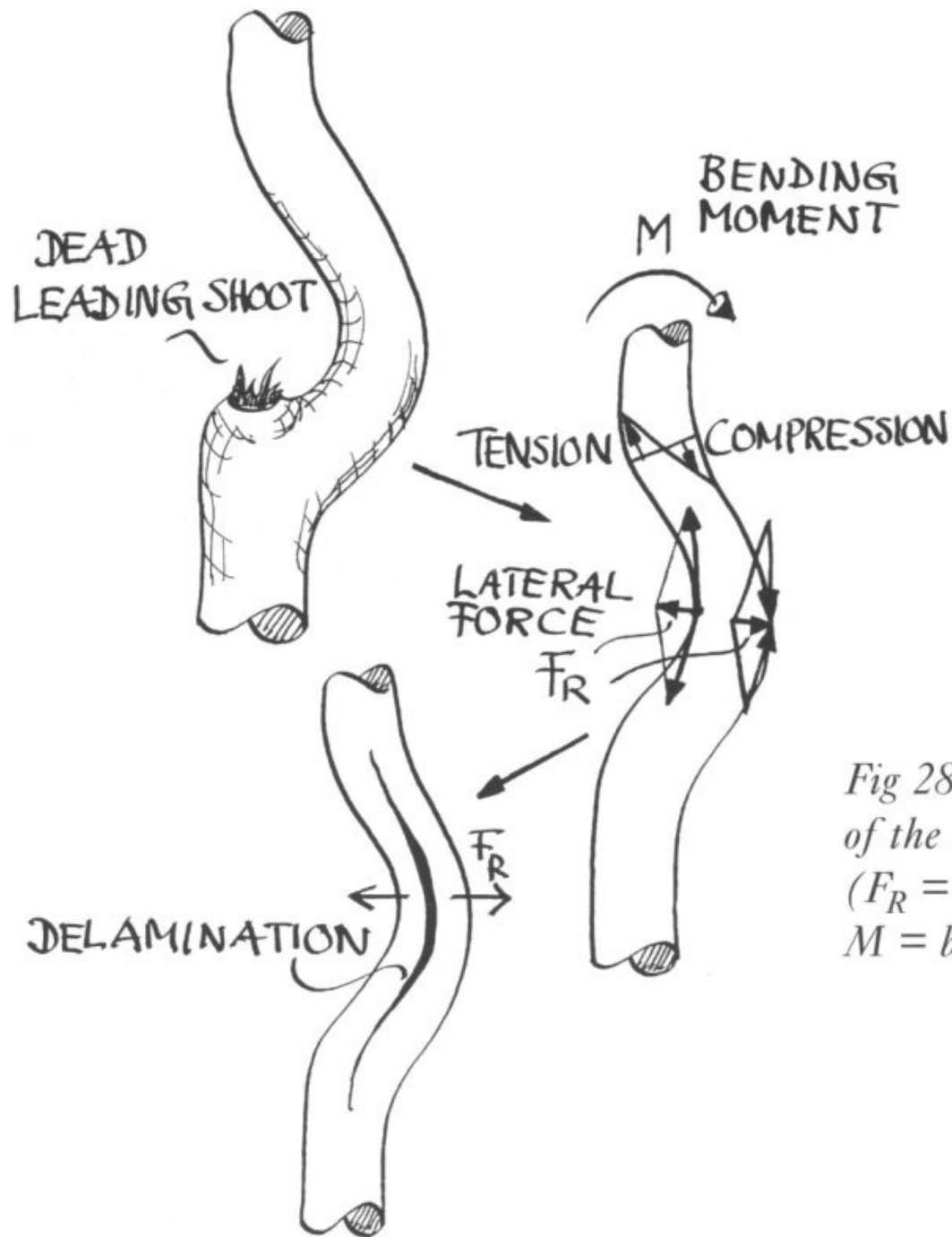
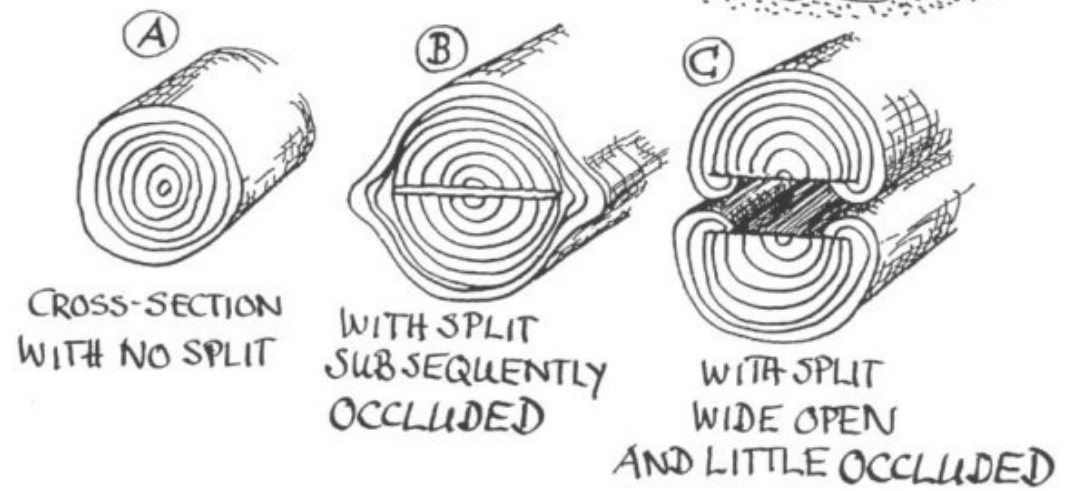
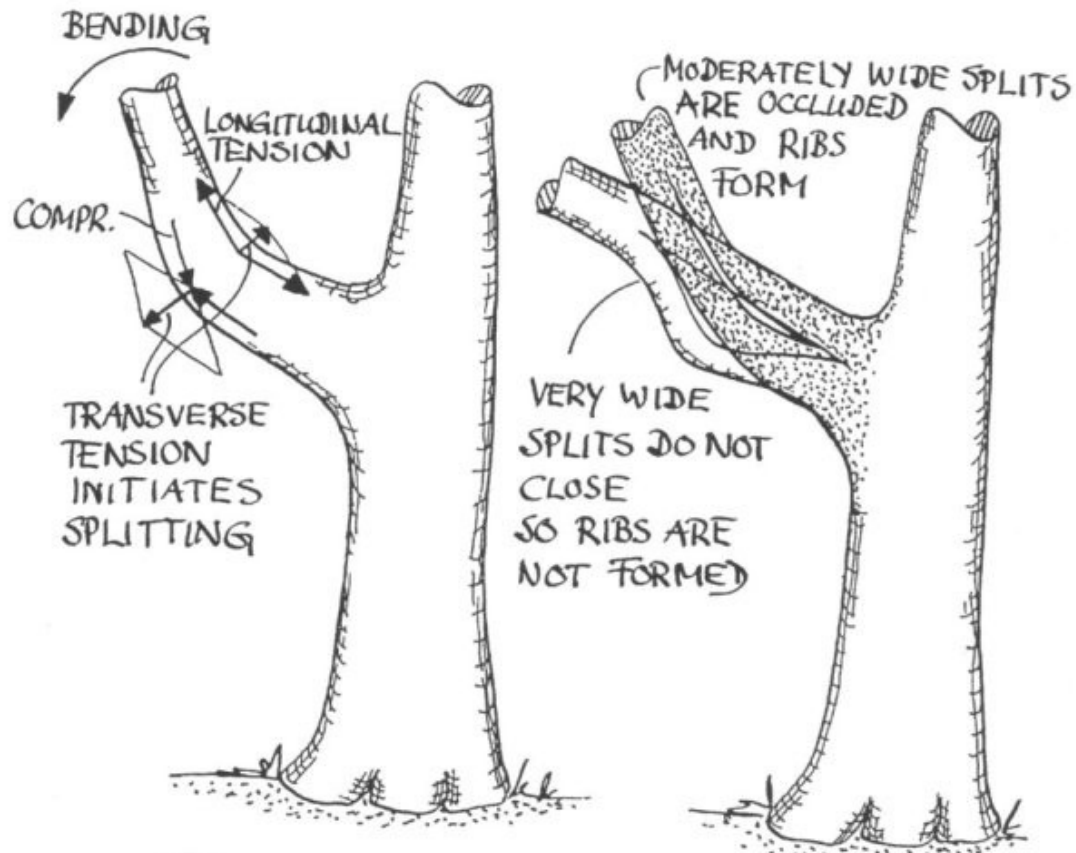
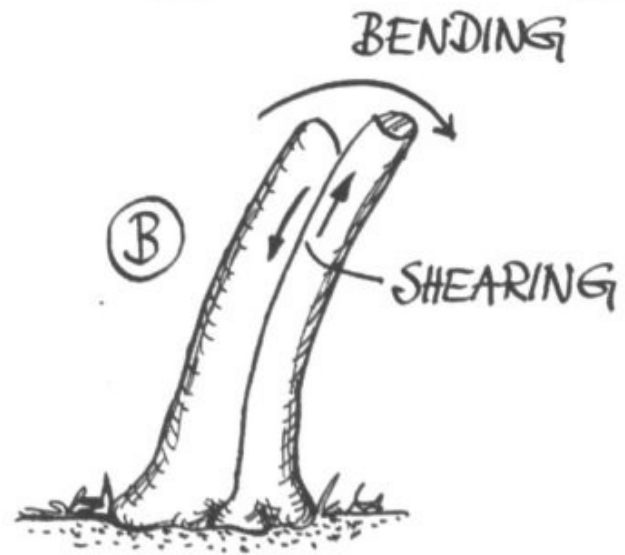
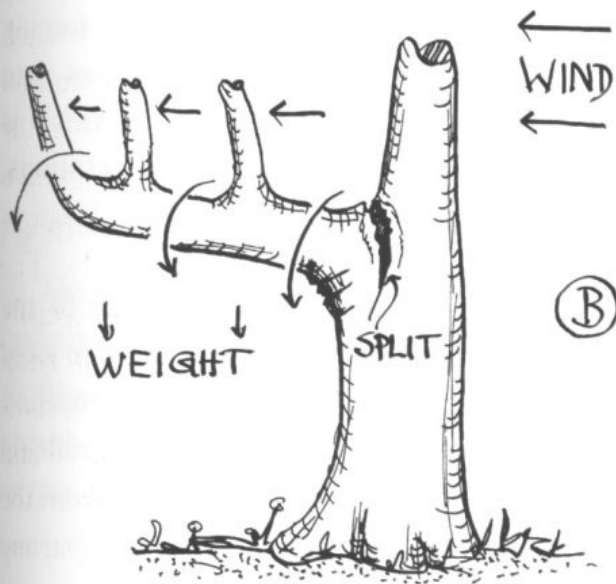
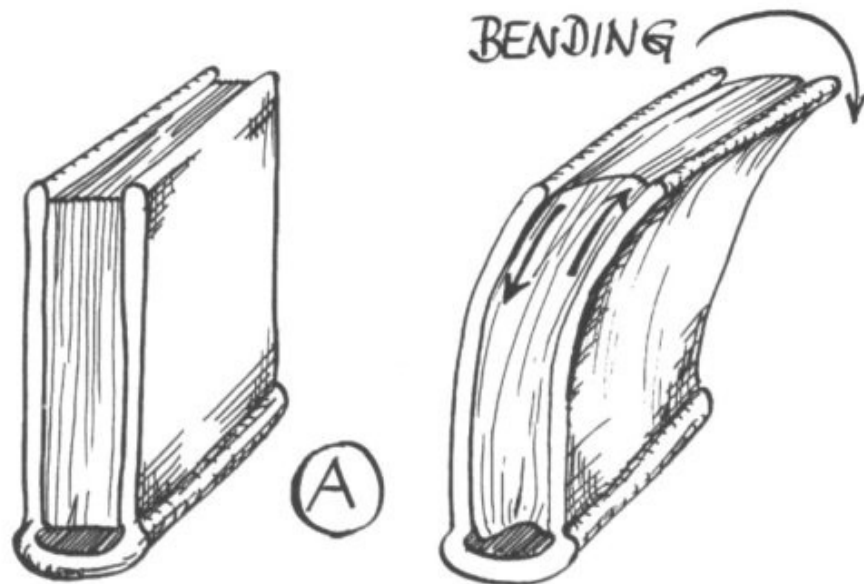
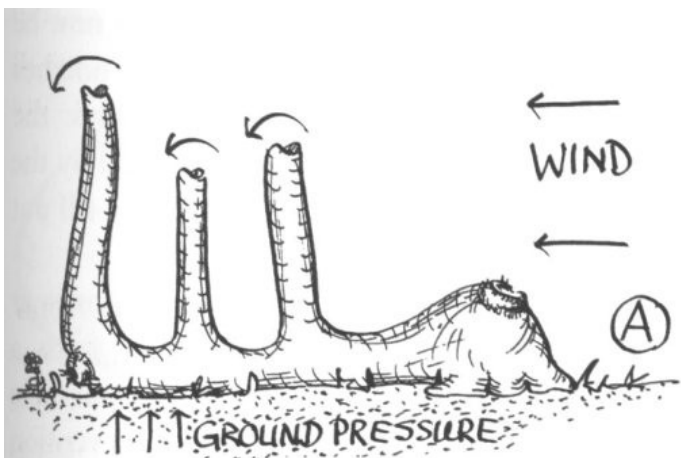
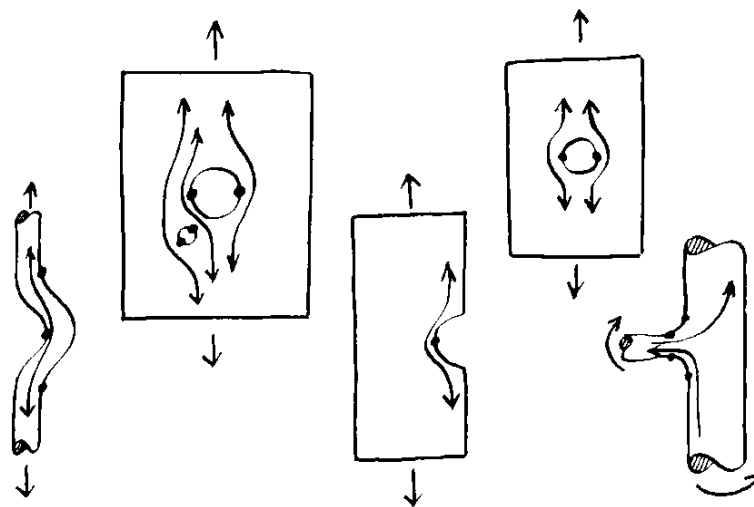
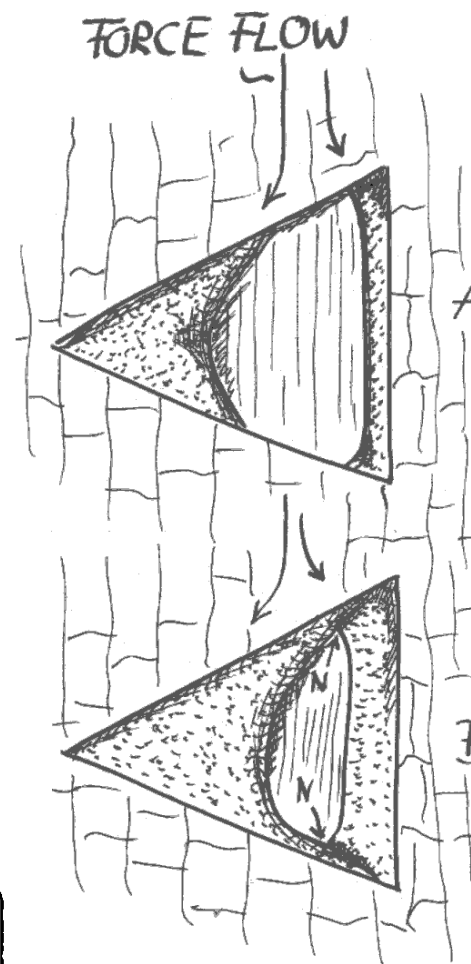
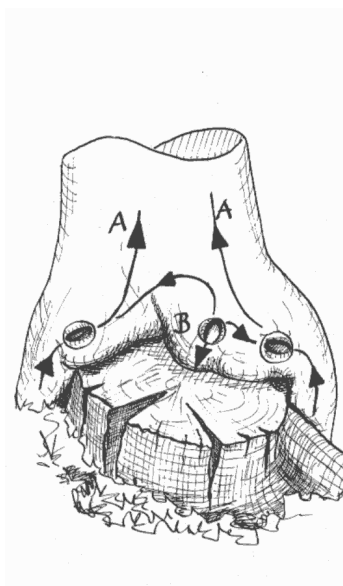
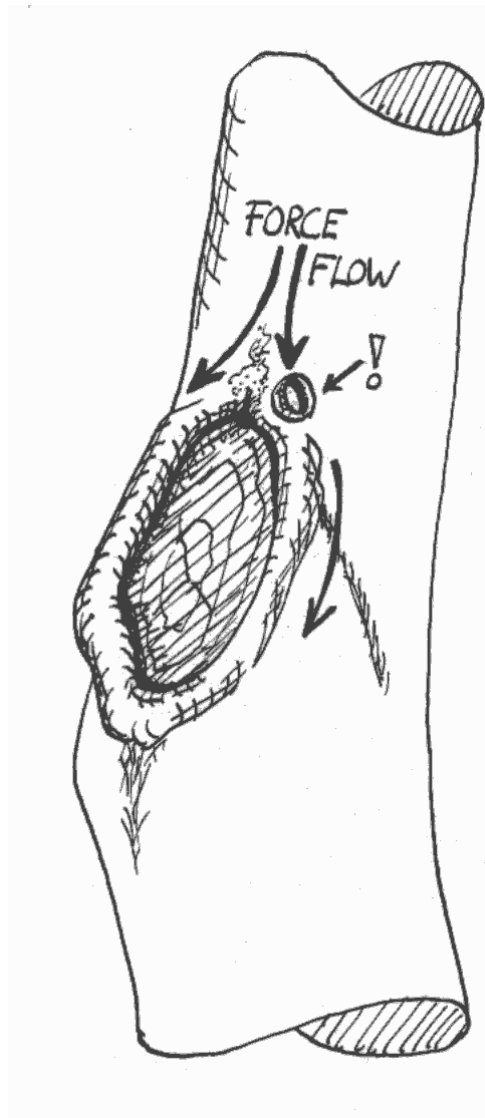
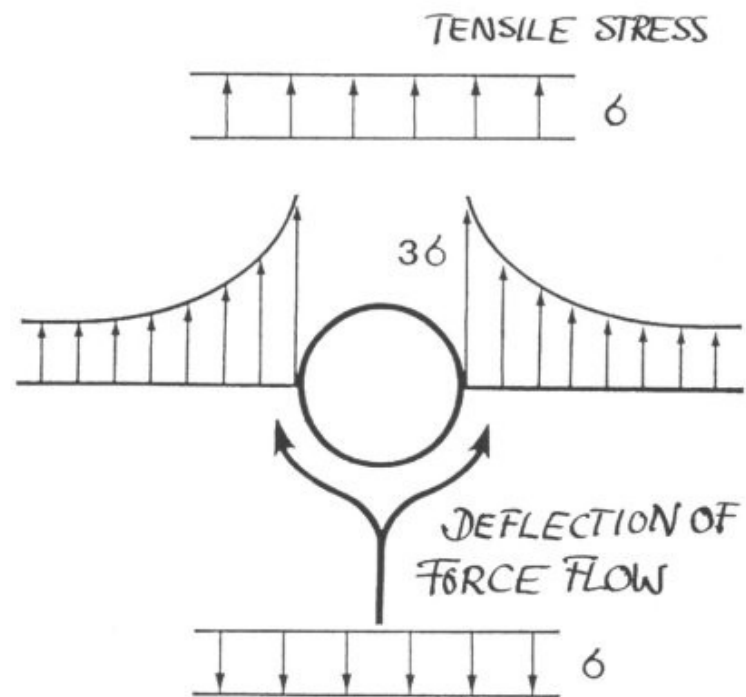


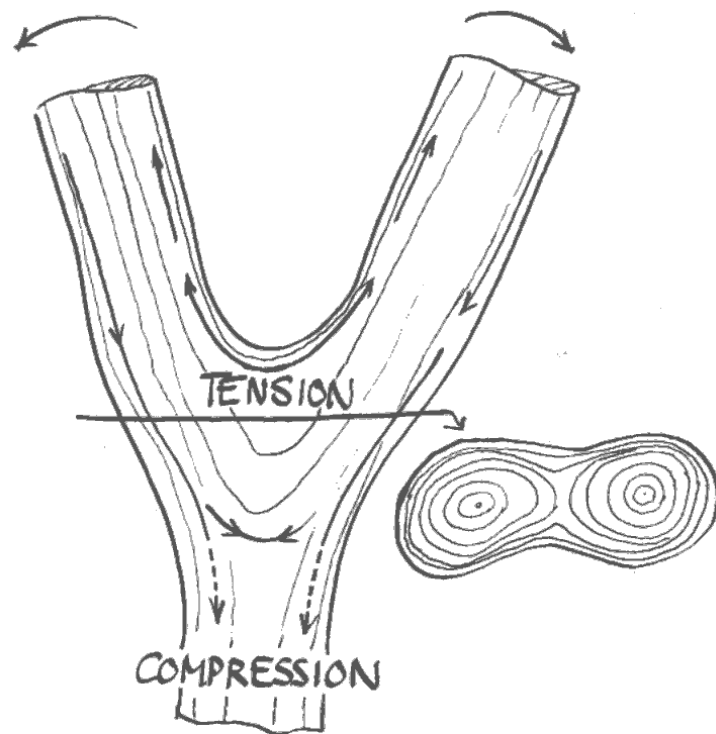
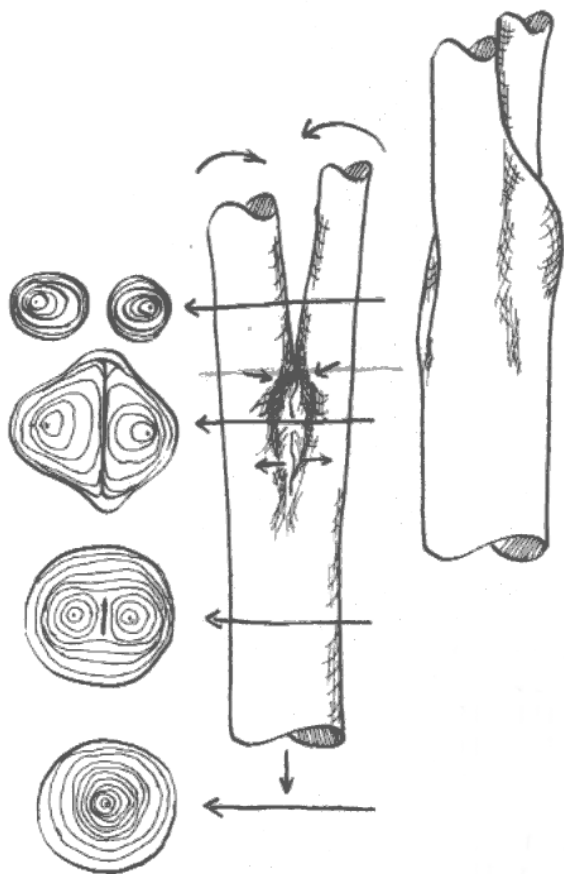
Fig 28. The mechanics of the hazard beam.
 (F_R = Lateral force;
 M = bending moment)





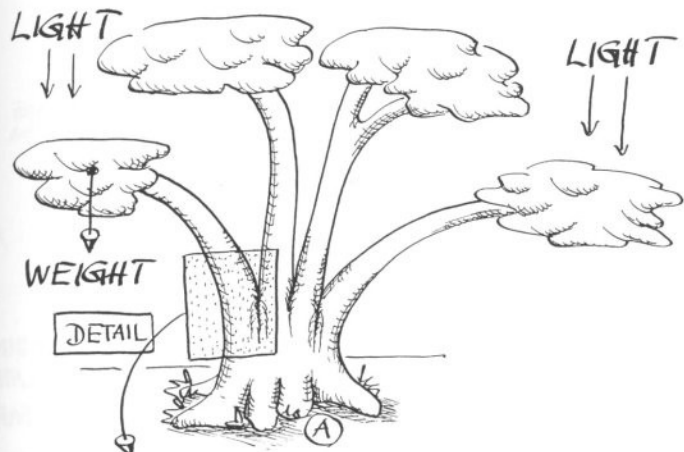






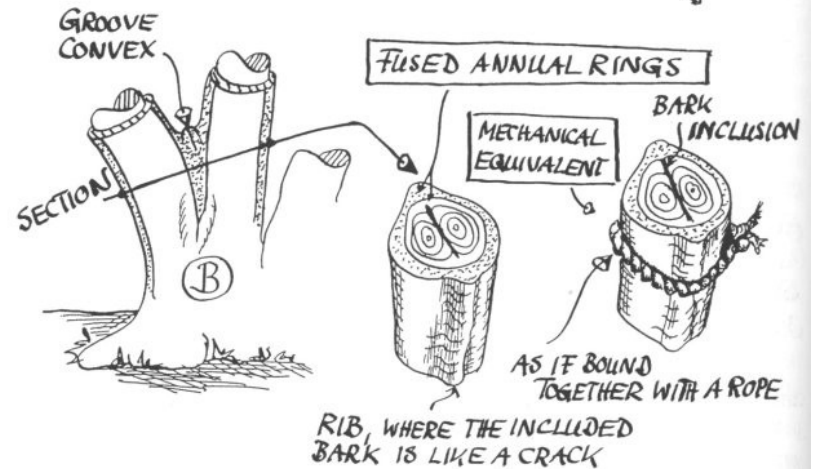
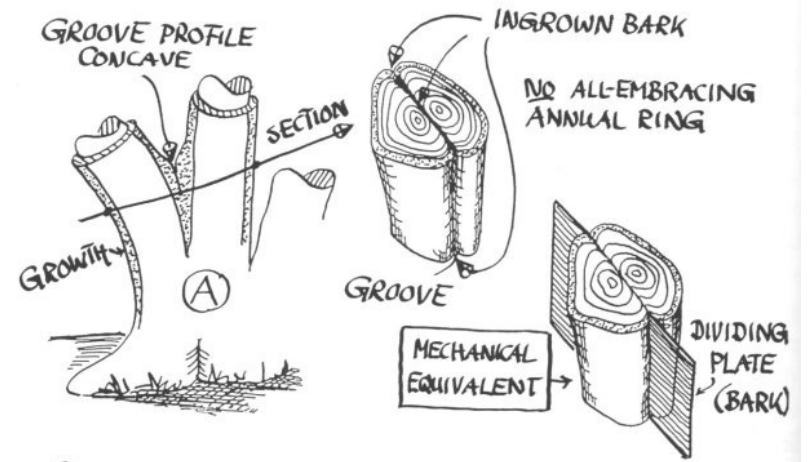
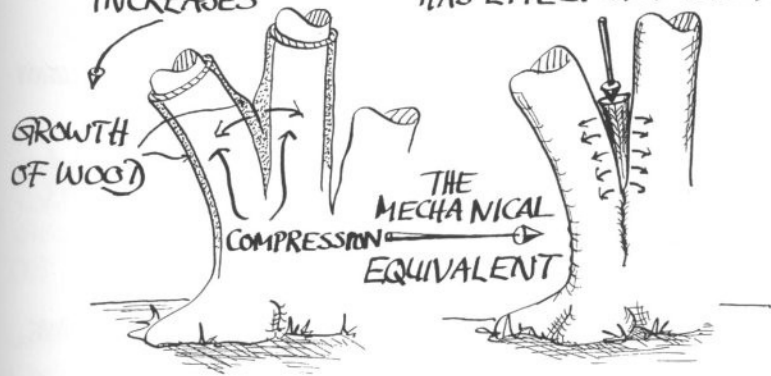


Tento projekt je spolufinancován Evropským sociálním fondem a Státním rozpočtem ČR InoBio –
CZ.1.07/2.2.00/28.0018



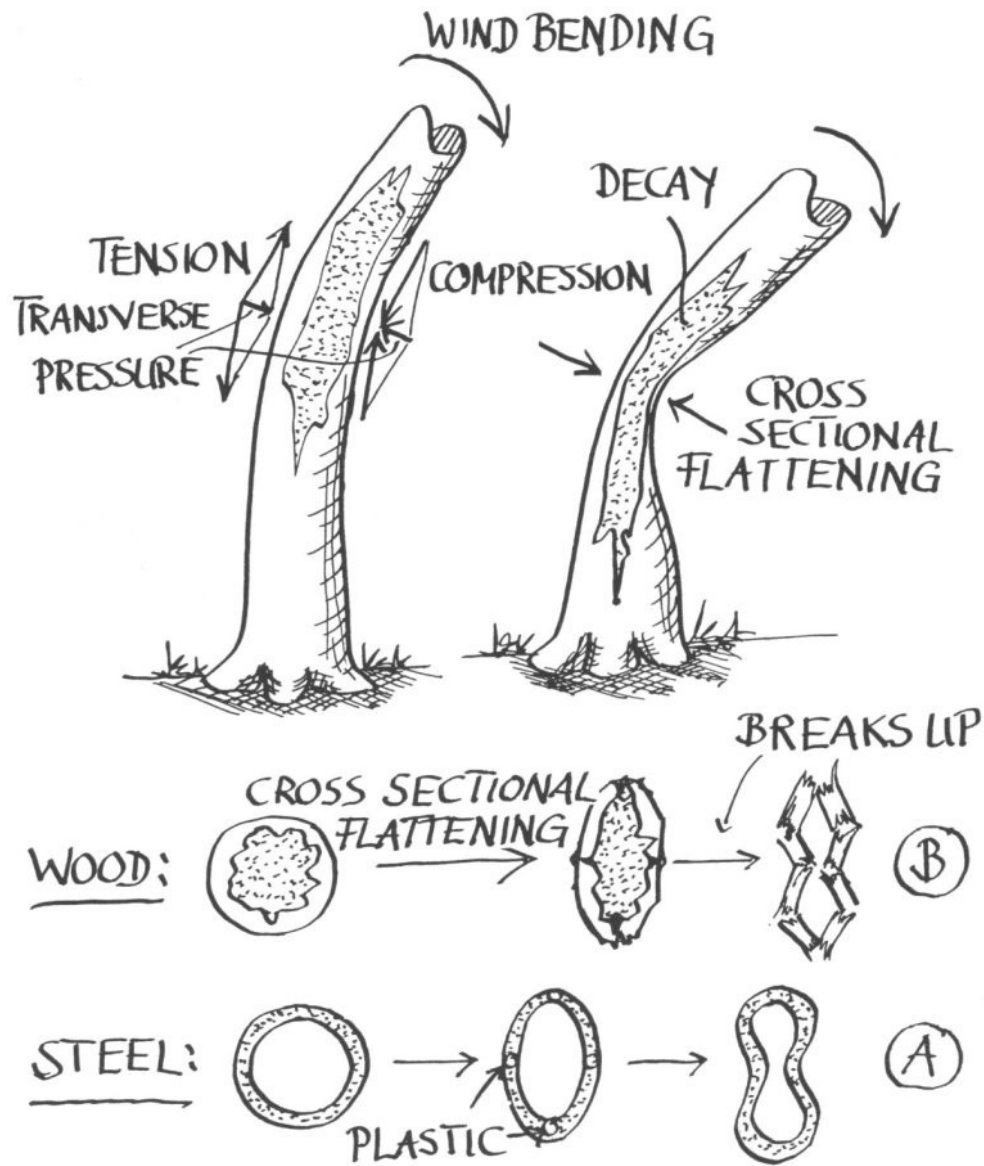
LEAN INCREASES

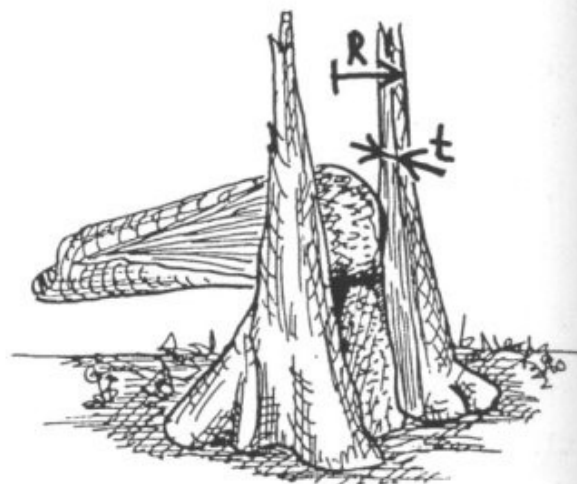
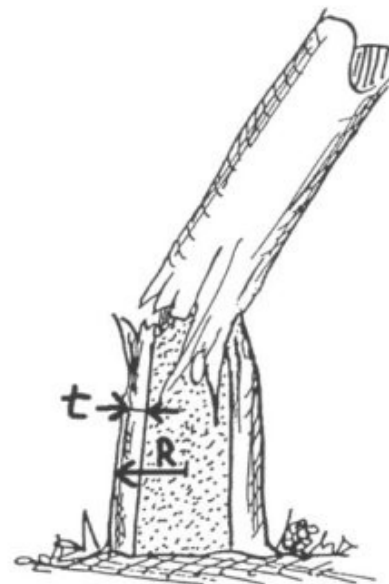
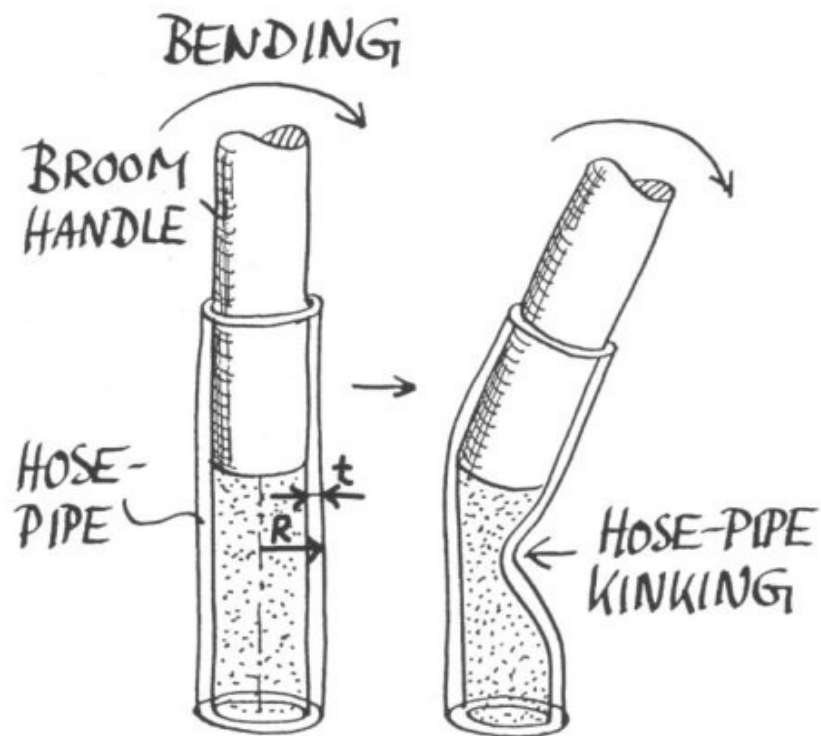
GROWTH OF WOOD HAS EFFECT OF A WEDGE

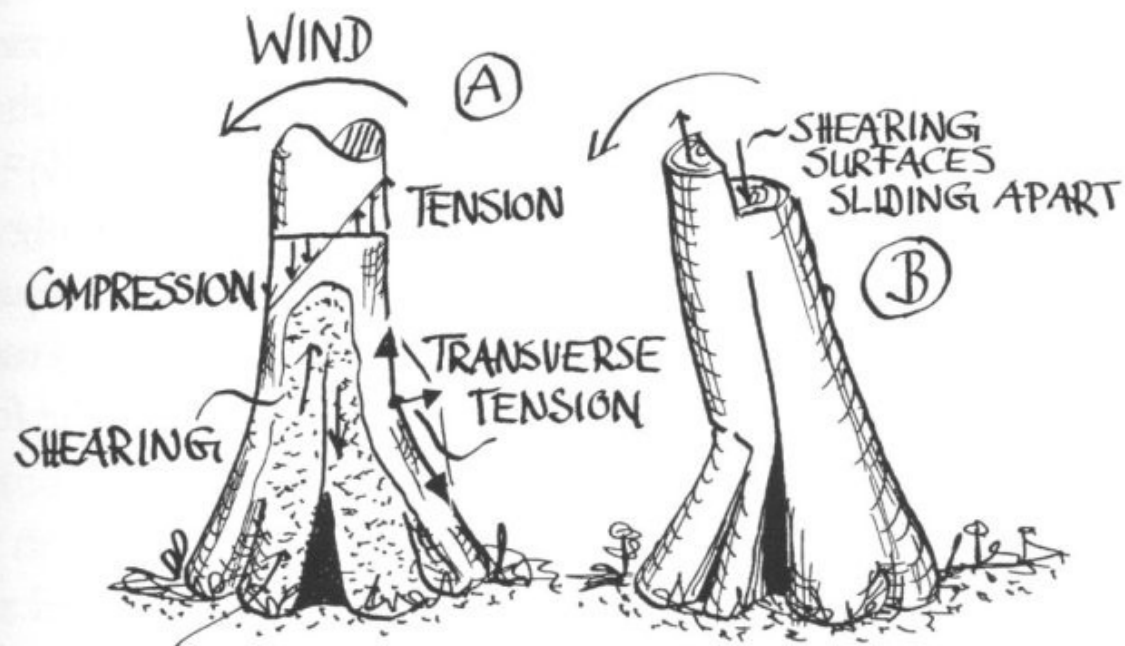


CAUTION:
EVEN IN THE LESS UNSTABLE CASE (B) THE INCLUDED BARK HAS THE SAME EFFECT AS A CRACK





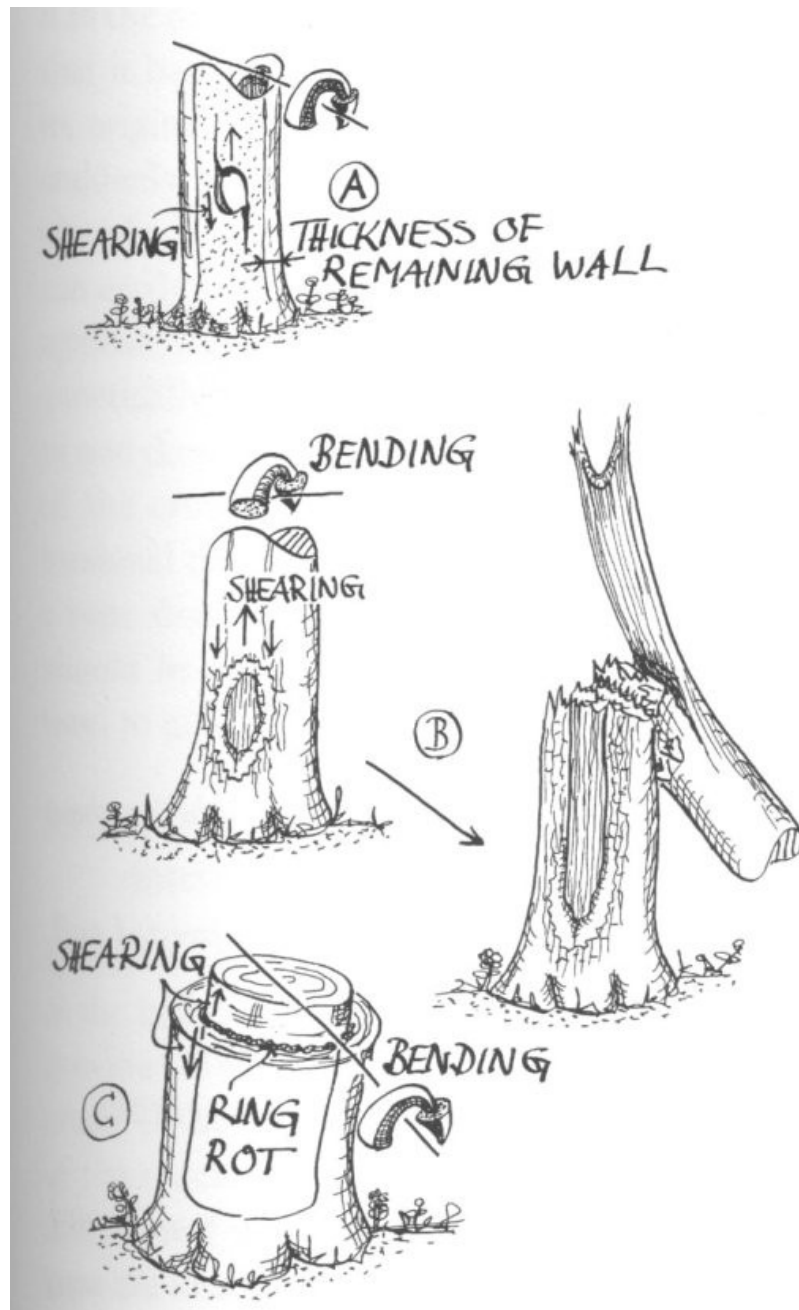


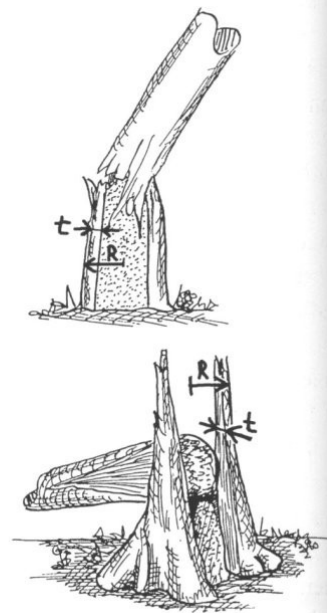
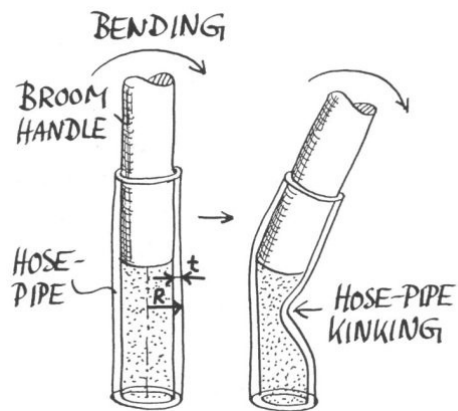
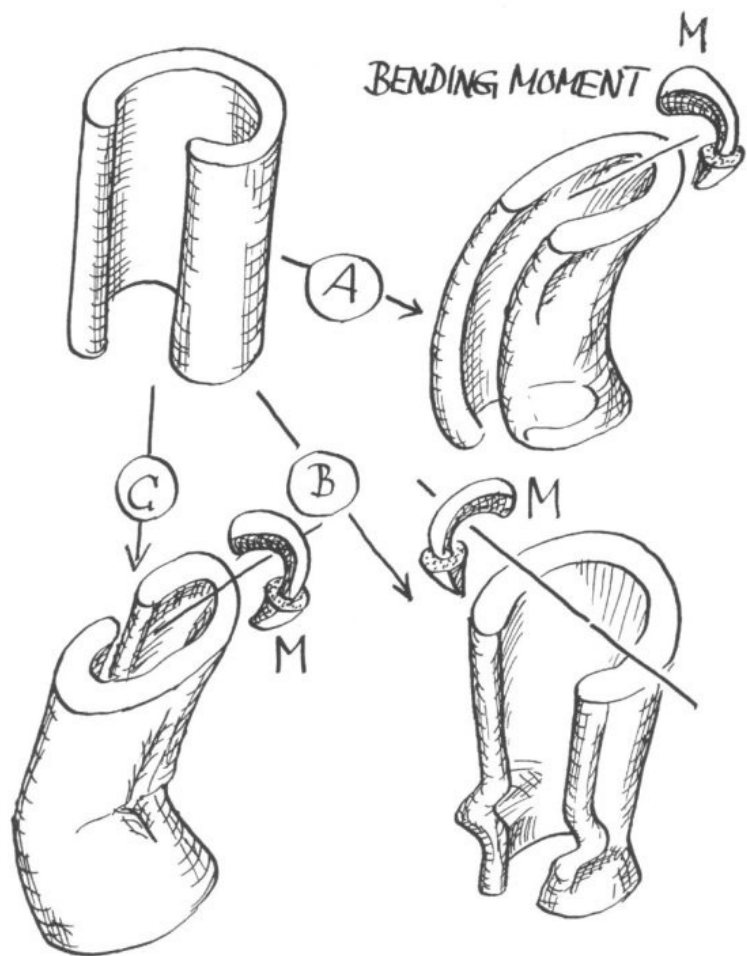


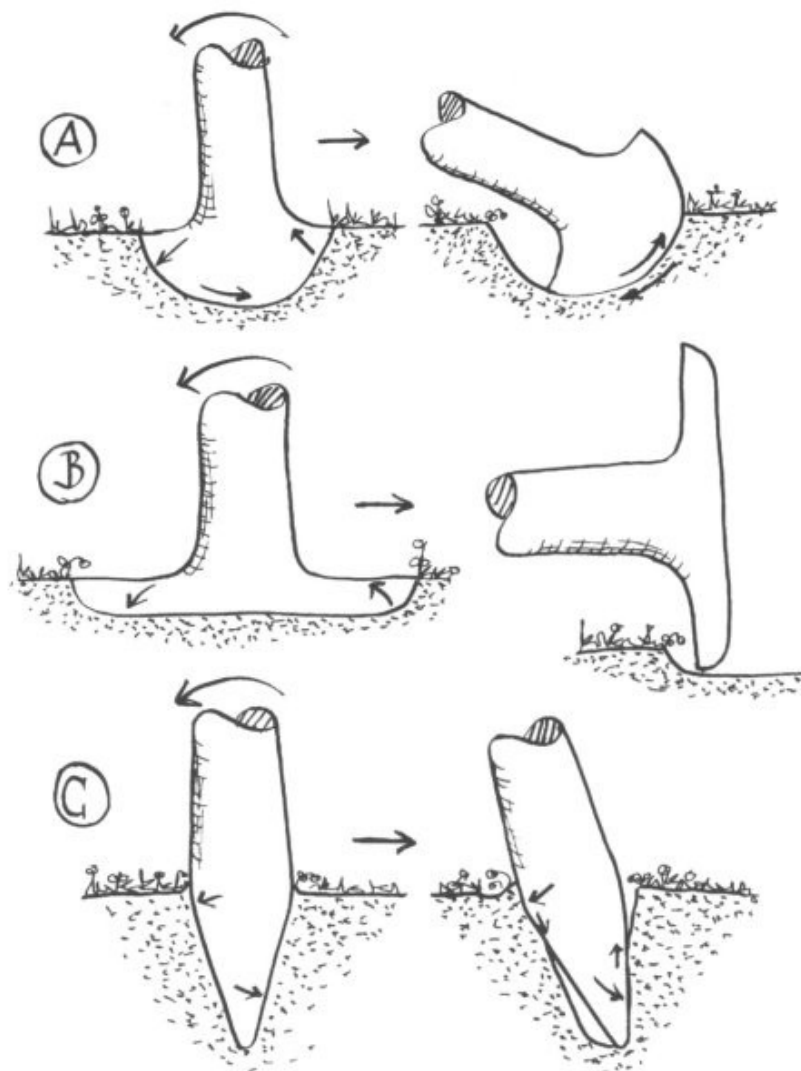
BUTT ROT
SPREADING
UPWARDS

(C)









DĚKUJI ZA POZORNOST

Luděk Praus

Ústav nauky o dřevě, Lesnická a dřevařská fakulta,
Mendelova univerzita v Brně

<http://wood.mendelu.cz/>

Zemědělská 3, 613 00 Brno
e-mail: ludek.praus@centrum.cz
tel.: 545 134 551



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ