Trail Building 101

designing & building sustainable trails

3 goals:

limit environmental impacts

keep maintenance to a minimum

avoid user conflicts

http://www.imba.com/resources/trail-building

IMBA

KTC

Trail Catastrophe 101
Eschew
The Fall Line!
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Trail Building 101

A Contour Trail...

- is a path that gently traverses a hill side,
- is on a gentle grade with undulations, aka, grade reversals,
- and has a tread that usually tilts or out slopes slightly toward the outer edge,
- where surface water slowly drains in thin sheets,
- and soil stays where it belongs - <u>on</u> the trail.

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Trail Building 101

Essentials

- Route trail to positive control points (e.g., views, water, trees, rocks)
- Use bench-cuts; excavate soil from the hillside
- Find and build on contours
- Use out-sloped tread (≈5%)
- Use frequent grade reversals - *surf* the hillside
- Use ½-rule: trail's grade ≤ 50% grade of hillside
- Keep avg. trail grade ≤10% (with grade reversals)
- Keep trail grade ≤15% (except for rock substrate)

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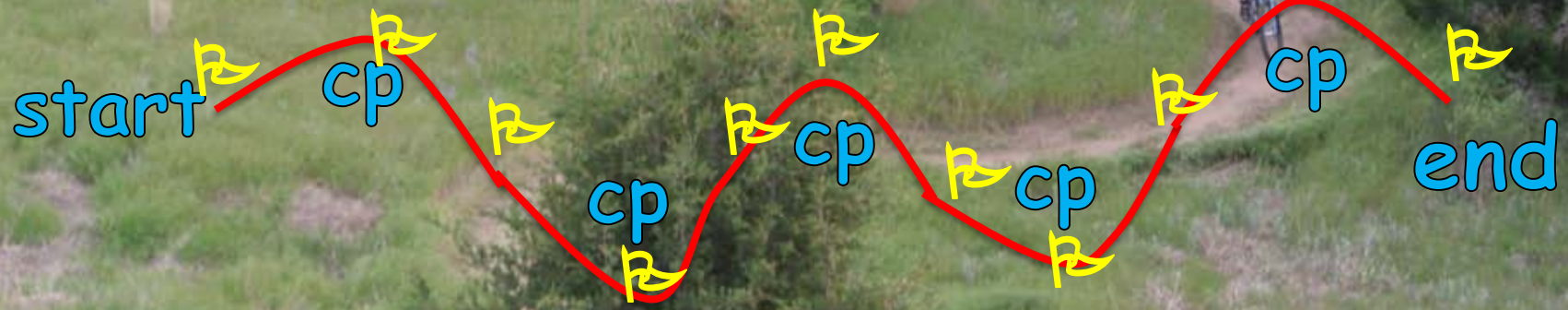
Trail Building 001

How to Start a New Trail

- Decide where to begin and end trail
- Select control points
- Plan a route to connect:



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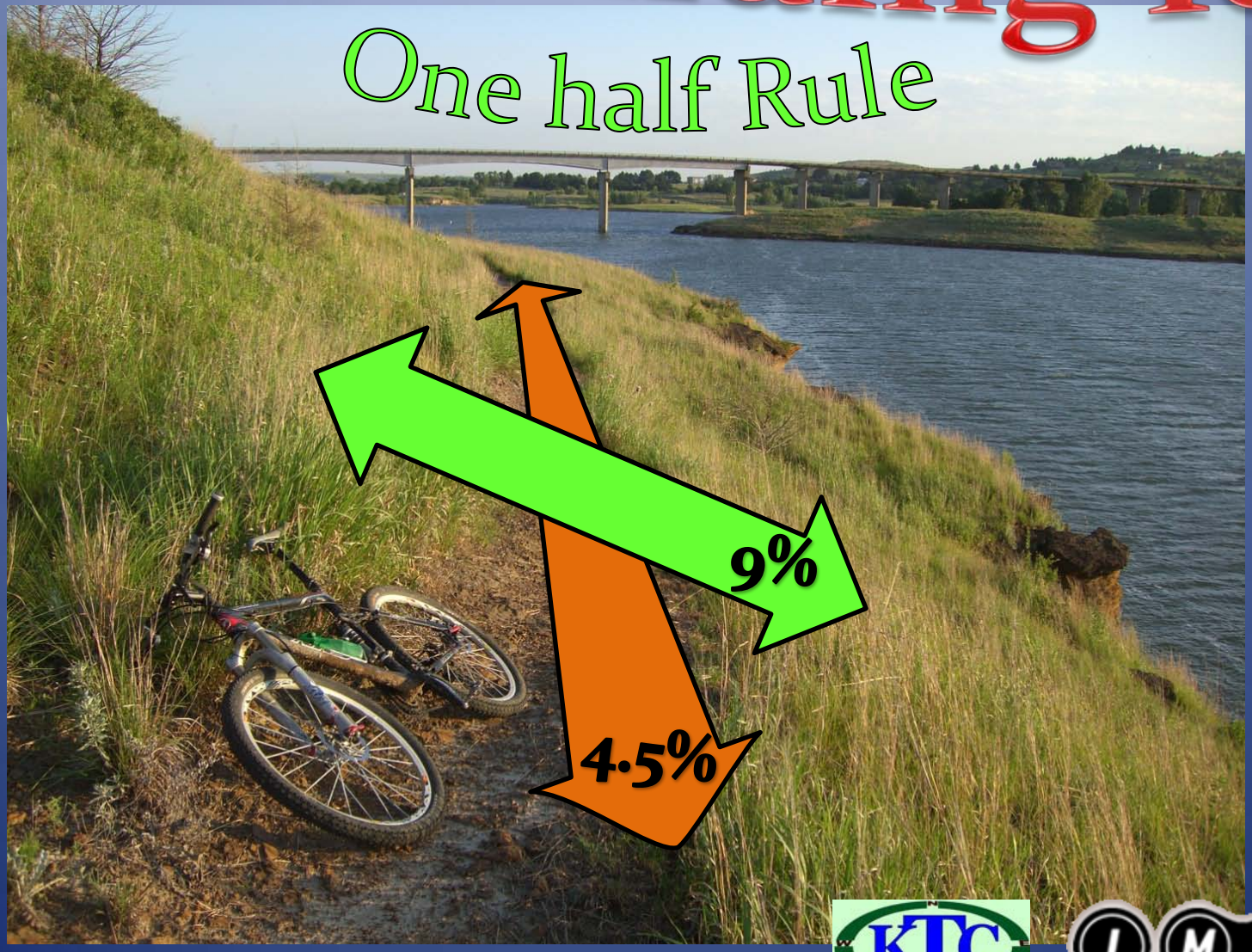
Trail Building 101



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Trail Building 101

Bench Cut Trails

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Grade Reversals

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Trail Building 101
Out Slope
≈5%
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Maximum Sustainable Grade

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Trail Building 101

Dogma

Sustainability = f { Half Rule, 10-% Avg Grade, Maximum Grade, Grade Reversals, Outslope }

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Trail Re-building 101

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Trail Building 101

Mech ain

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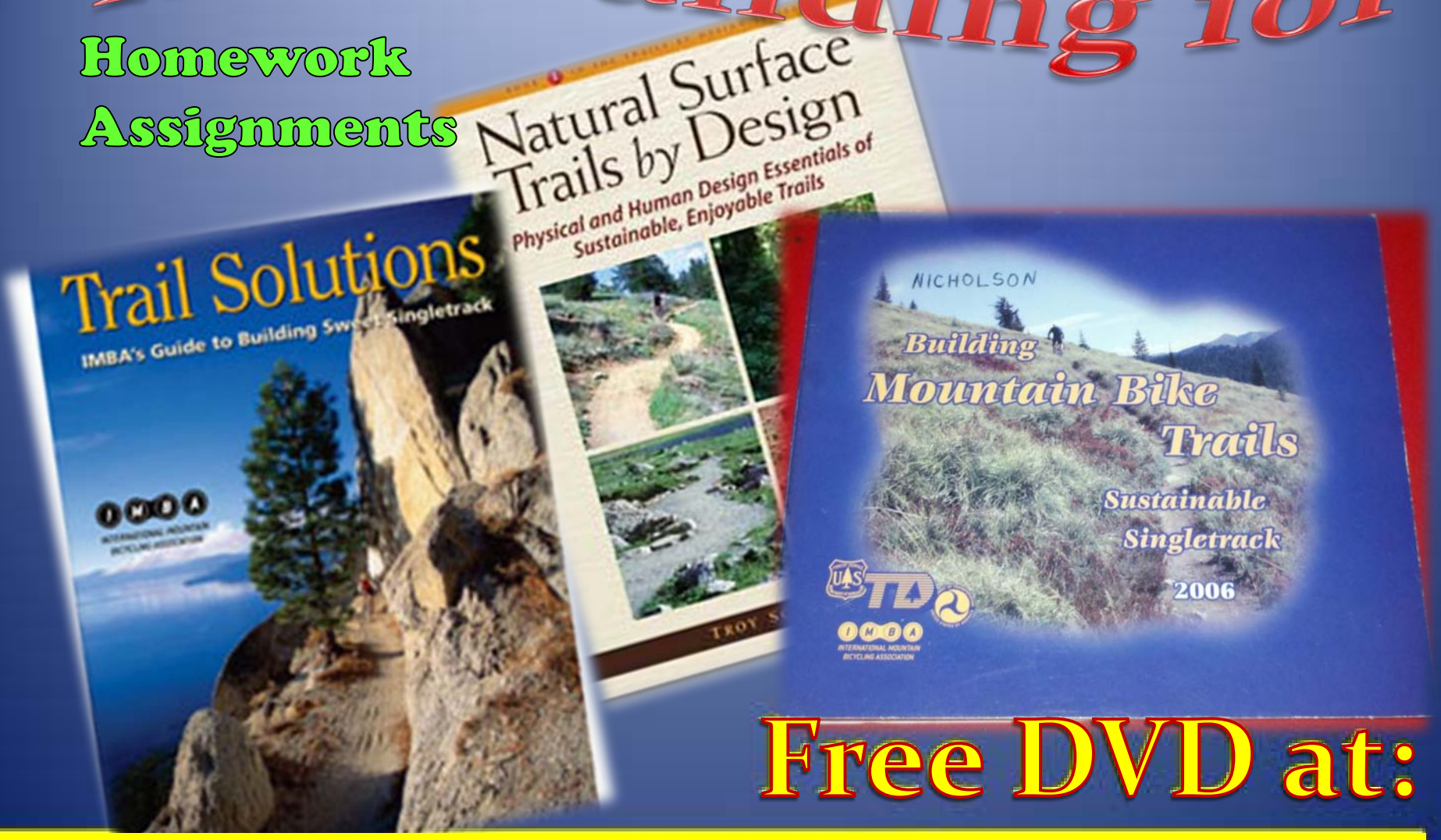
Trail Building 901

On Steroids!!

Trail Building 101

Homework Assignments



Free DVD at:

http://www.fhwa.dot.gov/environment/rectrails/trailpub.htm

Building Social Trail Network

www.facebook.com

search for: switchgrass

Canine Trail Testing