

Integrated weed control for sport and leisure surfaces

Dr Ruth Mann

Head of Turfgrass Protection

STRI



About us

The logo for STRI, consisting of the letters 'STRI' in white, bold, sans-serif font, set against a dark green rectangular background. The background of the entire slide features light green, wavy, abstract patterns.

STRI is the leading consultancy for sports surface advice and cutting-edge research. We provide solutions and advice to more than 2,000 clients each year.

Formed over seventy years ago our experience and knowledge delivers specialist advice on all aspects of sports surface design, research and maintenance. Our reputation has been built on offering independent and impartial advice and consistently delivering high quality results.

Our Services

- øDesign & Construction
- øSportsturf Advisory & Environmental
- øStadia Services
- øResearch & Testing

Outline

- Sports and leisure areas?
- Weed problems
- Current control measures
- Gaps in suitable control

Winter sports pitches



Fine turf areas



Winter sports pitches

- Perennial ryegrass/smooth stalked meadow-grass
- Football cut 30-40mm
- Rugby cut 40-60mm
- Major weed issues
 - Annual meadow-grass
 - Broadleaved weed seedlings at renovation
 - Clover in lower input situations

Bowling greens and golf courses

- Bent/fescue, fescue or creeping bent, perennial ryegrass, smoothstalked meadow-grass
- Mown between 2 and 25mm
- Major weeds issues
 - Annual meadow-grass
 - Yorkshire fog
 - Perennial ryegrass?
 - Some broadleaved weeds

Effects of weeds and moss

- Unsightly
- Create an uneven playing surface
- Increase organic matter levels
- Increase susceptibility to disease
- Compete with the desirable grass
- Reduce wear tolerance
- Make hard surfaces and pathways unsafe

Organic matter (thatch)

STRI



Firmness



Moisture content

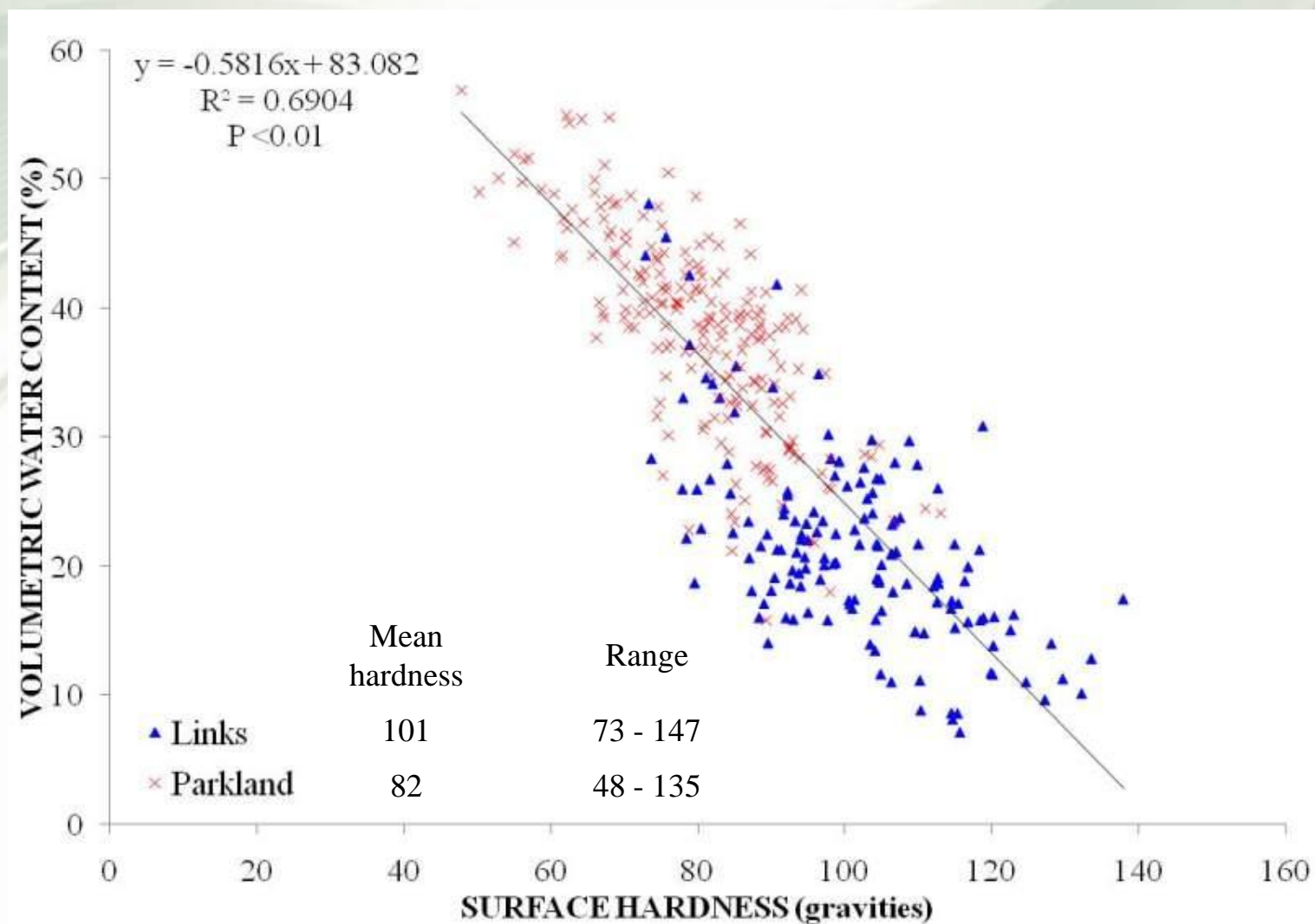


Smoothness and trueness

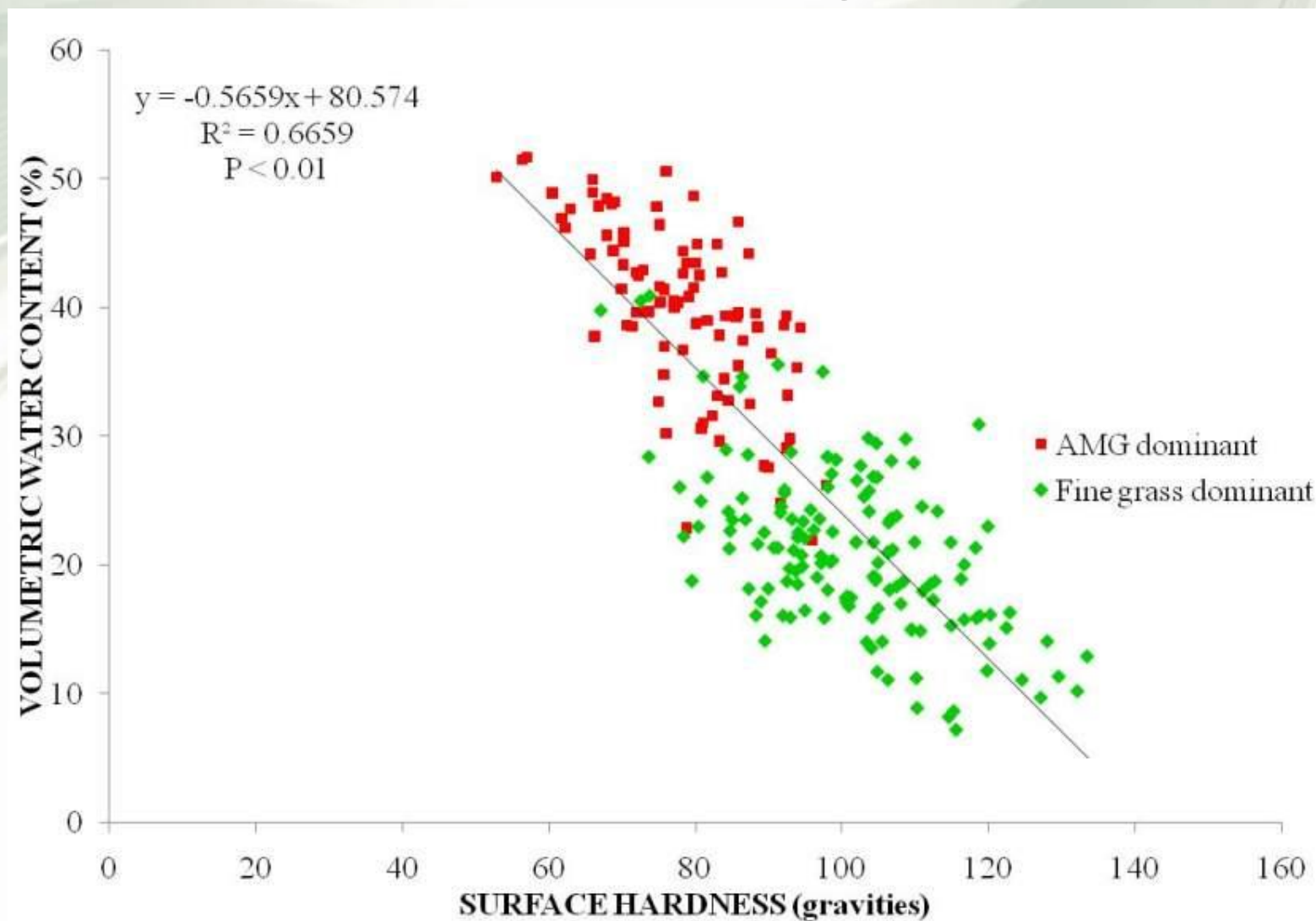
STRI



Firmness and soil moisture



Soil moisture and organic matter



Smoothness and trueness



Smoothness and trueness

STRI



Cultural Control

The logo for STRI (Sports Turf Research Institute) is a green square with the letters 'STRI' in white, positioned in the top right corner of the slide.

- control pH/regular fertiliser applications
- improve light/air flow
- improve drainage/relieve compaction
- irrigate dry areas/apply wetting agents
- regular mowing/remove high and low spots/remove clippings
- discourage earthworms (remove casts/acidify)
- scarify

Earthworm presence

STRI



Lack of fertility



Lack of fertility



Dry surface



Wet surface



Close mowing



STRI 2002

Compaction



STRI 2002

Contaminated seed



Chemical Control



- Broadleaved weeds
 - Synthetic auxins in varying mixtures e.g. MCPA, dicamba, clopyralid and fluroxypyr
- Mosses
 - Ferrous sulphate or carfentrazone-ethyl
- Grasses
 - Pinoxaden (ryegrass/Yorkshire fog in fescue)
 - Tepraloxydim (AMG in fescue – SOLA)

Broadleaved weed control



Untreated

Broadleaved weed control



MCPA, mecoprop-P and dicamba

Yorkshire fog control

STRI



Courtesy of Simon Watson, Syngenta

www.stri.co.uk

for excellence in sports surfaces

Perennial ryegrass control

STRI



Problem areas

STRI

- Annual meadow-grass control in desirable grasses
- Germander speedwell
- Babys tears (*Soleirolia soleirolii*)
- Mosses
 - Esp. silver moss (*Bryum argenteum*)

Contact Us

STRI

Contact us for more information on STRI Research and our services:

STRI
ST Ives Estate
Bingley
West Yorkshire
BD16 1AU
UK

T: +44 (0)1274 565131

F: +44 (0)1274 561891

E: info@stri.co.uk

www.stri.co.uk



www.stri.co.uk

for excellence in sports