

Fundamentals of Strength Training

Will Ruth
BS, MA, NSCA-CSCS



Masters Conference: April 2, 2022



BS Kinesiology, MA Sport Coaching

NSCA-CSCS, US-Rowing L2

Western Washington University 2013-2019

Craftsbury Sculling Center 2019-Present

RowingStronger.com



Today's Presentation

- Build on prior webinars
 - rowingstronger.com/2020/04/06/rowing-stronger-usrowing-webinars/
 - Minimalist/at-home, exercise selection, programming details, training the hip and shoulder, returning to training, scheduling, and more...
- Fundamentals
 - Alignment: Athlete → Goals → Methods
 - Year-Round Consistent Approach
 - Session Examples/Templates
- ~30 mins: Q&A



The “Typical” Masters Rower?

- Chronological Age (years)
- Developmental Age (adult hormonal changes)
- Training Experience (greatest variety)
- Goals and Motivation



Training Experience

Low



Moderate



High

“The First
Timer”

“Returning/
Transferring”

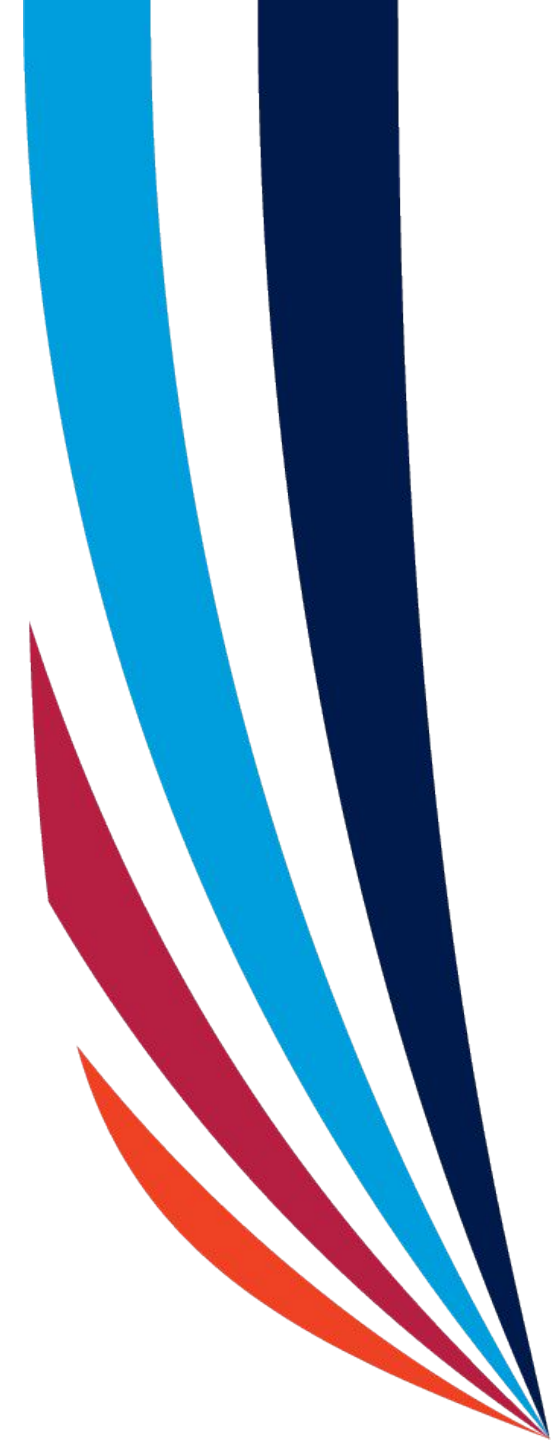
“Never
Stopped”



Strength Training?



Athlete Goals/Motivation?



Training or Exercising?



Park Bench

Consistency

“Did you do the thing?”



Bus Bench

Accountability

“A → Closer/Further → B”

Early and Consistently

- Improve rowing performance (technique, power, endurance = speed)
- How much, how often, exactly what?
- Part of a healthy, physically active lifestyle alongside aerobic exercise.
- **Level 1:** Full-body warm-up with some strength movements.
- **Level 2:** 2-3x/wk 20-30 mins bodyweight/at-home
- **Level 3:** 2-3x/wk 45-60 mins loaded/gym-based

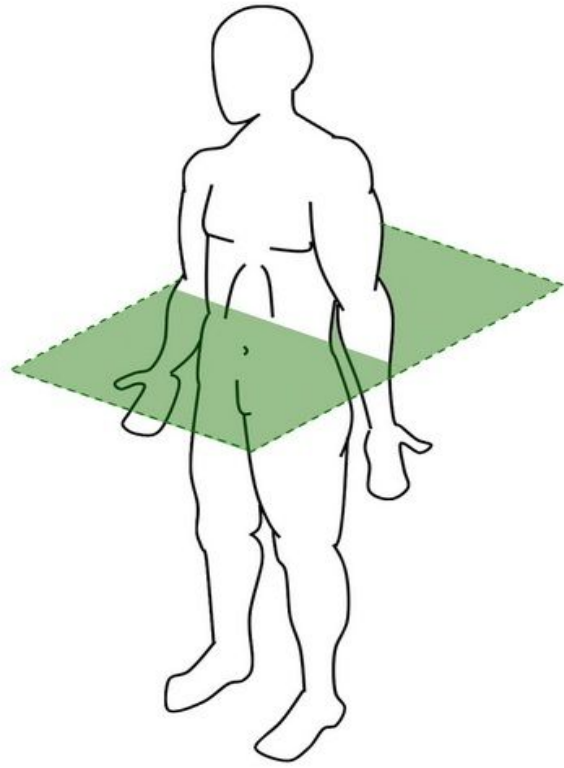


Be an Athlete

- **More bodyweight/free-weight** than machines
- **More multi-joint compound movements** than isolation exercises
- **More lower reps (3-10)** than higher reps (20+)
- **More cross-training time** during some phases
- **Plyometric and coordination** training of some sort
- **Multi-plane movements**, not just flexion/extension only

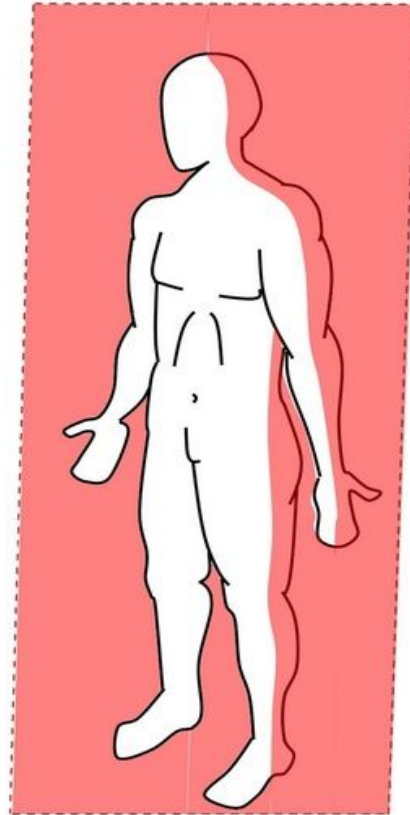


Transverse



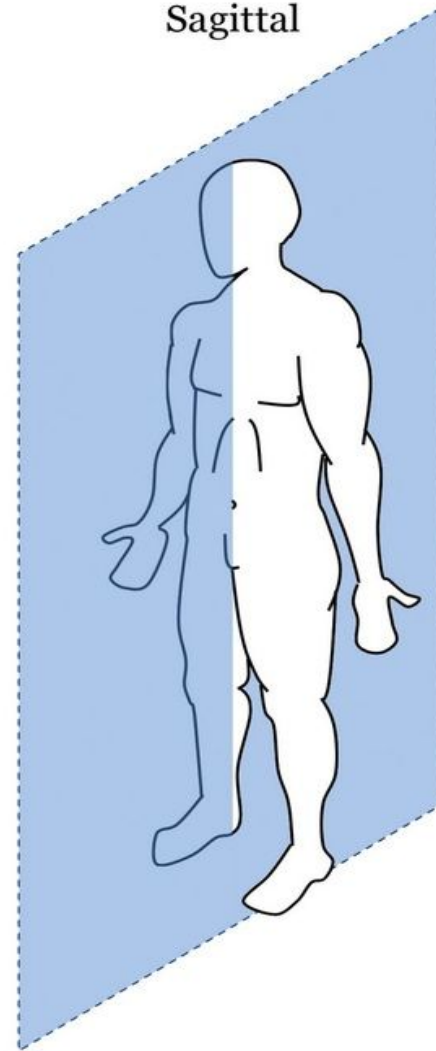
**Rotational
(Twisting)**

Frontal

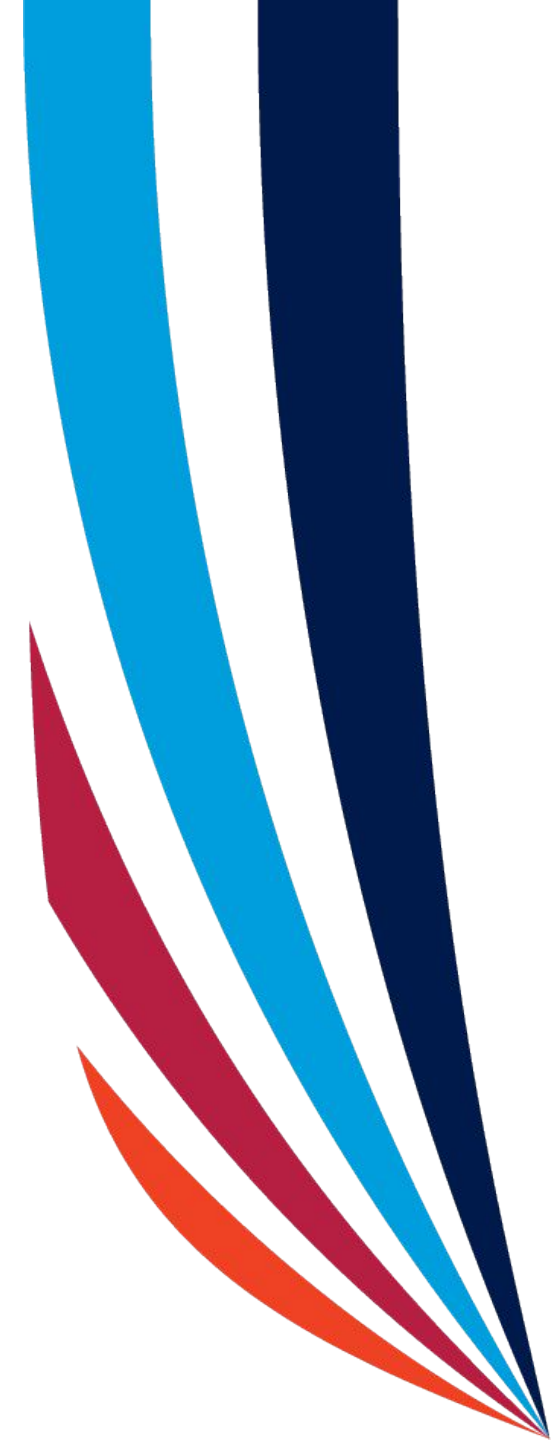


**Lateral
(Side-Side)**

Sagittal



**Flexion/Extension
(Forward/Backward)**



Plyometric Progression

Pre-Req	Landing	Jump Rope	Side-to-Side Hop	Fwd-Bwd Hop
Beginner	Two-Leg Countermvmt	Two-Leg Non-Countermvmt	Jump Rope	Single-Leg Hopping
Intermediate	Low Box Jump	Broad Jump	Overhead Throw	Backward Throw
Advanced	Seated Box/ Vertical Jump	Repeat/Tuck Jumps	OH/Backward Throw	Hurdle Jumps



Burpees/Jumpies aren't plyometrics.

Unless they are: Low rep, high output, non-fatigued.



Two-Phase Minimum

OFF-SEASON: row/erg ↓

- #1. Health, body composition
 - #2. Base-building: muscle, strength, aerobic
 - #3. Maintain: power, anaerobic fitness
- 2-3 strength training sessions/wk with higher volume and variety to build.

IN-SEASON: race prep ↑

- #1. Race performance
 - #2. Maintain: health, muscle, strength
 - #3. Gains are possible, but bonus
- 2 shorter, higher-intensity strength training sessions/wk to maintain.



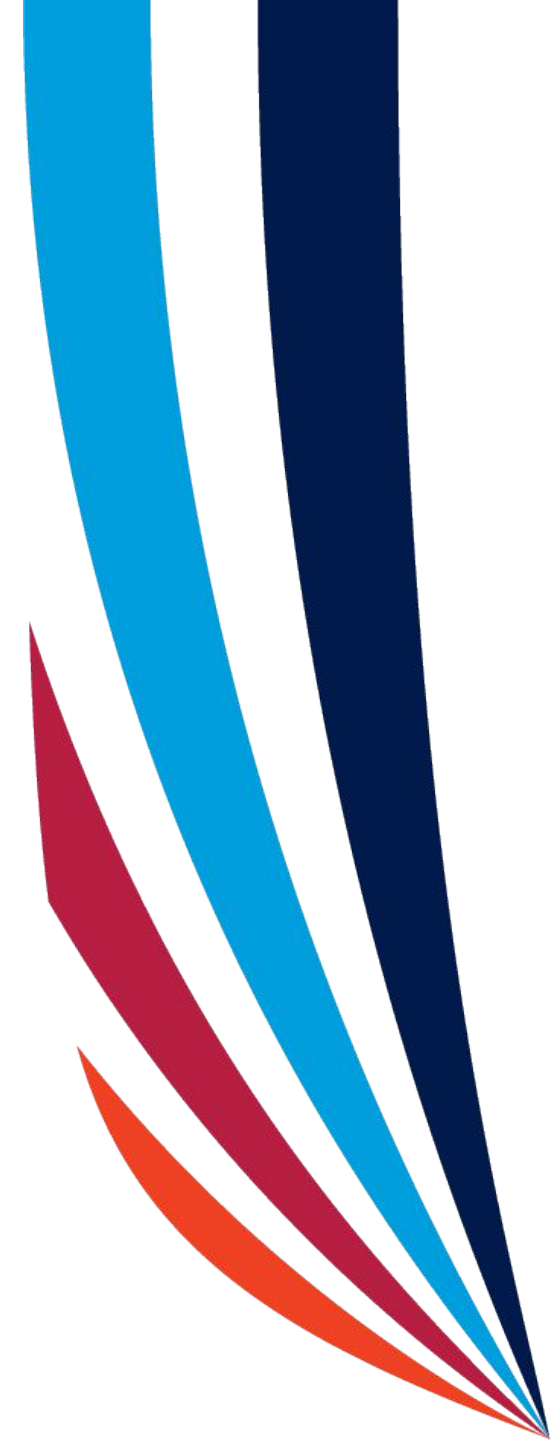
If you stop strength training at the start of the season, you're strongest when it matters least, and weakest when it matters most!

Two vs. Three vs. Four

Two Phases	Off-Season (General strength, body composition)		In-Season (Power/Perform)	
Three Phases	Off-Season (General strength, body comp.)	Pre-Season (Power)	In-Season (Perform)	
Four Phases	General Off-Season (Body comp.)	Specific Off-Season (Strength)	Pre-Season (Power)	In-Season (Perform)



Develop some, maintain others, don't try to prioritize everything at the same time.



Off-Season → In-Season

In-Season = Maintaining

Off-Season = Build something worth maintaining

6-8 weeks: Increasing strength via coordination

10-16 weeks: Changing body composition



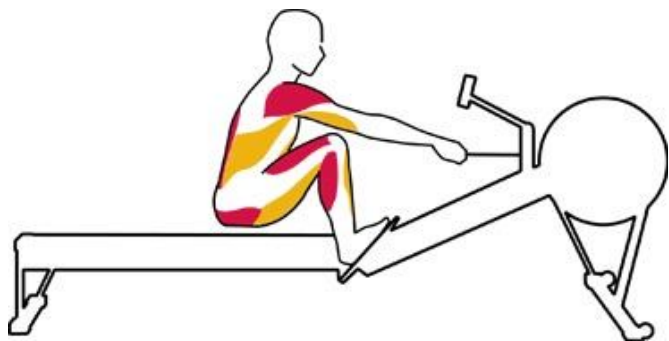
Start Starting!

	Now (Spring)	Regionals to Nationals	Fall Racing	Off-Season
Beginner	Bodyweight, low load, coordination, learn the movements			ALL: Rejuvenate, then build
Intermediate	Strength	Power	Strength	
Advanced	Strength	Power	Strength and/or Power	

No “strength-endurance”?



Training methods must adapt!



- Year-round
- High volume
- “Specific” endurance

Square (1847)



Macon (1960)



Cleaver (1992)



- Greater + earlier force
- More upright posture
- More lower body
- Shorter + higher rate



Training Session Template

Day 1

Full-Body Warmup

A1. Plyometric (Jump/Throw)

A2. Squat Variation

B1. Horizontal Push

B2. Horizontal Pull

B3. Hinge Assistance

C1. Lateral/Rotational Hip

C2. Shoulder Prehab

C3. Core

~10 mins to prepare

← 3-6 x 2-4 reps for power/coordination →

← Train for power/strength (3-5 x 3-8 reps) →

← Train for muscle/balance (3-4 x 8-15 reps) →

← Train to fill gaps (2-4 x 10-20 reps) →

Day 2

Full-Body Warmup

A1. Plyometric (Jump/Throw)

A2. Deadlift Variation

B1. Overhead Press

B2. Vertical Pull(down)

B3. Single-Leg Squat

C1. Lateral/Rotational Hip

C2. Shoulder Prehab

C3. Core



<https://rowingstronger.com/exercise-index/>

Contact & More

StrengthCoachWill@gmail.com

www.RowingStronger.com

