

PART 3: Strength training methods

Rowing only (including resisted)

- Upper-body limitation
- Wear/tear or excessive load:
 - Lumbar-spine
 - Ribs
- Technique concerns?

Resistance methods

- Equipment:
 - weights, hydraulics, air-drag, elastic bands or gymnastics?
- Adjust intensity:
 - Resistance or speed
 - Changes in lean body mass?



Intensity: RM training zones

Reps:	1	3	6	9	12	15	20
Traditional	3RM			10RM			
ROWING		6RM			15RM		

Experienced

Less-experienced

Method A

- Greater intensity
- Complex exercises (Cleans & squats)

Method B

- Greater volume
- Segment exercises (rows & presses)

Neurological



Morphological



TRAINING ZONE: 1 & 2

EMPHASIS: STRENGTH

Method B

Method A

Notes

Special conditioning musts:

- Snatch Squat
- PNF DB Diagonals OR Bodyblade
- Box squats OR Sumo Squats
- Cat/Camel/Allah
- Book opens
- Pornstar
- Prone Pec/Bicep Stretch

Select appropriate level from the load
selectors

'BASIC STRENGTH'

15x DYNO Leg Press (any # of brakes)
15x RDL & Row OR Prone Hip Extension

15x 1-Leg Press
15x 1-arm DB Row

15x Bench Press
15x Bicep Curls and Tricep Pushdown

Superset exercises (upper/lower)

HEAVY: 4 sets

LIGHT: 2 sets

'KARAPIRO CLASSIC'

6 x Pulls OR Powercleans
6 x Squats OR Leg Press
6 x RDL & Row
6 x Seated Cable Row OR Prone Bench Row

Each exercise individually - >2min rest b/w sets

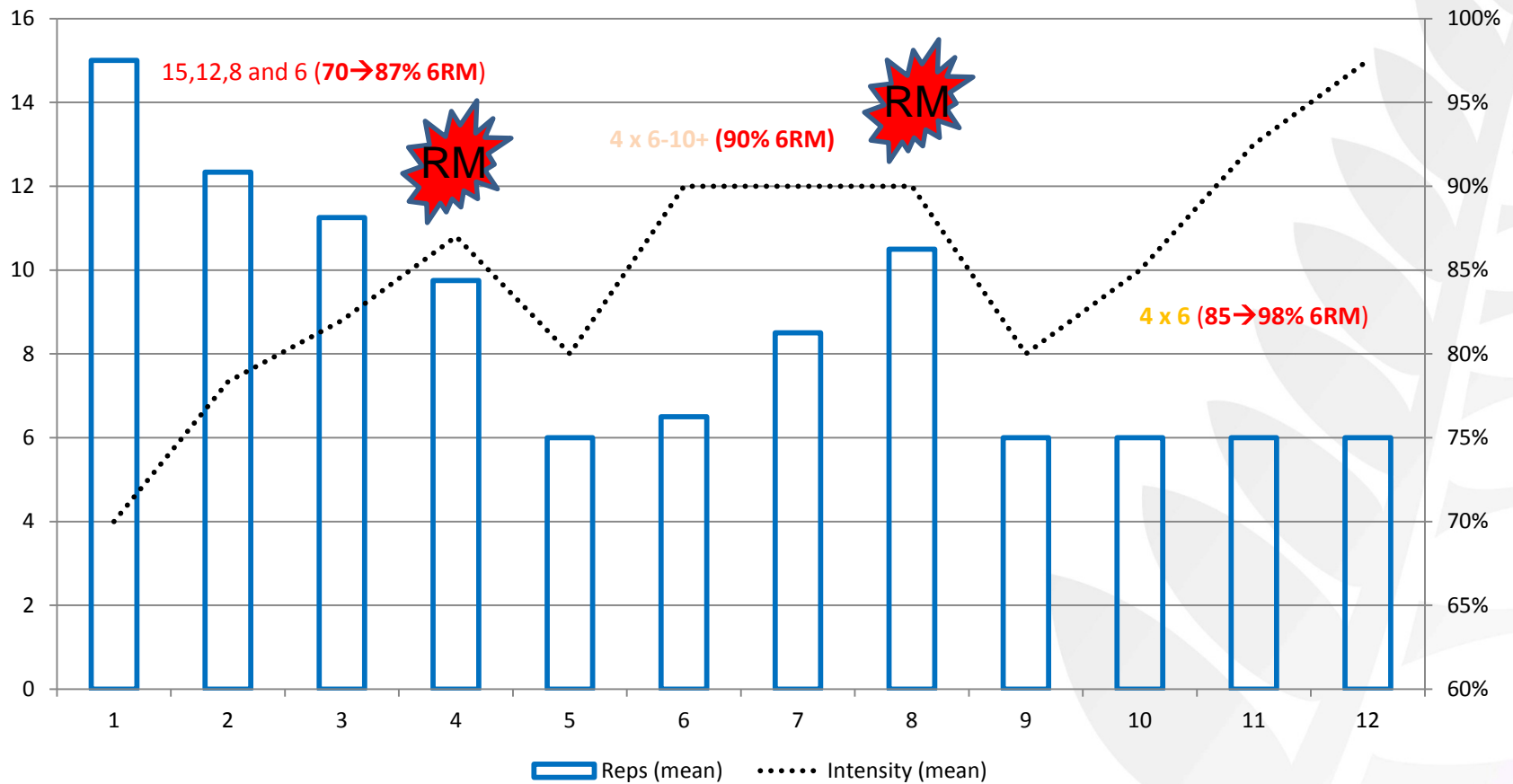
HEAVY: 5 sets

LIGHT: 3 sets

Periodisation: load variations (2 x week)



Test to assign loads (6RM)



Benchmarks

Heavyweight men		ZONE 1			
Repetition guide:		~6 reps			
Pick list	Medal	A-Final	B-Final	C-Final	
DYNO Leg Press [2 Brakes]	1190	1100	940	770	
Leg press	270	250	210	180	
Power cleans	95	90	75	65	
Prone bench row	95	90	75	65	
Pulls	160	150	130	105	
Squats	140	130	110	90	



Coach, as load is dictated by form



Part 4: Success indicators

- **Commitment**
 - Assigning time (united purpose), and
 - effectively integrating (energy to pursue)
- **Focus**
 - Individuals 'own' goals, and
 - Clear connection between personal target(s) and performance
- **Action-belief**
 - Pursue benefits or goals with passion, and
 - Unnerved by opinion

Summary



IF NOTHING ELSE:

- Over 8-12 weeks, lower-body strength clearly greater on inclusion of weight training
- Minimum worthwhile change (+10%), and
- Weights and ergs same problem: they aren't rowing!



**HIGH PERFORMANCE
SPORT NEW ZEALAND**



Common questions

Low or high reps?

- Both, define goal.

What differs for U23?

- Faster gains as lower base, more body-part and unilateral exercise (single leg press) as technique refined for more complex lifts (like cleans or deadlifts), common needs.

What about Juniors?

- “Pass” overhead squat test of balance and mobility, all about technique, shorter campaign preparation so often more in-common activities

What is cross-fit?

- Constantly varied, high intensity (intervals of two or three exercises), and preferably whole-body activities. Not built around rowing schedule or goals.

Do all NZ rowers do weights?

- Not all the time (there are periods without).
- Depends on goals and needs; so why worry?



Ergometer and Land Training University/U23 Women

Dave O'Neill

Head Coach, Women's Rowing
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“The main thing is to keep the main thing the main thing.” - Stephen Covey

- Limited time. 20 hours per week.
- Wide range of skill and abilities of athletes.
- The main thing is to go fast at the end of the spring, Big-12's and NCAA's.
- It's too easy to focus too much on the short term and lose sight of the long term.
- “We are the ROWING team.”



Erg Training

- The daily routine can sometimes be more important than the overall “Training Plan.”
- Keep the workouts simple, short and competitive.
(CrossFit example. Bad training but interesting and engaging sessions.)
- Most results are recorded and distributed to the team. Always ranked fast to slow.



Individual and Team Goals

- Every time the group is together is an opportunity to develop a stronger team culture.
- Know the athletes. Know where they are and where they can be. Push them.
- Individual and Team goals given on a regular basis. Total transparency.



Erg Testing

- Be consistent with workouts and test dates from year to year. Same workouts on same dates to measure one year to the next.
- 30' @ 22-24-26 spm.
- 6000m @ open rate.
- 2000m @ open rate. (*spring only.*)



Technique on the Erg

- Only *HARD*, dynamic strokes on the erg. All easy workouts done off the machine.
- Row the same rhythm.
- Sliders used periodically. Arranged side-by-side, three across.
- Limited use of dynamic erg.



Land Training

- **Run**. Most basic athletic activity. Ability to move body-weight. Weight management.
- Abs/Core work (2 to 3 times per week.)
- Body circuits and body-weight squats.



LIFTING

- “We are the rowing team.”
- Goals: basic strength and injury prevention.
- Squats (front and back), RDL’s.
- *Max testing Power-cleans*. Complicated and risk of injury too high.

