

TRAINING ON

AUTO

BELAY

WITH NEIL GRESHAM

6 WEEK TRAINING PLAN | ADVANCED



TRUBLUE
AUTO BELAY

EMPOWERING EPIC CLIMBS

DISCLAIMER

** IMPORTANT - PLEASE READ THIS **

Please note that sports injuries can occur for any reason and at any time, regardless of careful warm-up and correct training practices. Neil Gresham and Head Rush Technologies cannot be held responsible. You train at your own risk. It is advisable to show your training program to a doctor if you have a medical condition.

This is a generic training program. If you have selected the correct plan then the workload will be geared approximately to a climber of your level. However, due to the effect of individuality, some will find the workload to be slightly too demanding, whereas others may find the plan too easy. It is your responsibility to fine-tune the plan so that it is right for you in terms of the overall workload (see: 'Monitoring recovery and making adjustments due to excessive fatigue')

It is also your responsibility to fine-tune each session (select appropriate climbs, grades etc).

If you are not confident to train then seek advice from a coach or apply for a personalized training plan from Neil at www.neilgresham.com



QUICK START GUIDE

Firstly, don't be put off by the length of this training plan! You don't need to read everything before you start training. Just take 5 simple steps:

01

02

Review the weekly plans. This will show you how each week of training is structured by phase.

03

View your daily workouts by clicking on the Session link in the weekly plans.

04

Take 2 rest days and start training!



05

Keep notes of your progress for each session in a training log as they will help you plan and refine your training in the future.



ADVANCED PLAN

6 WEEK TRAINING PROGRAM OVERVIEW & TIMELINE

WEEK 1-2

WEEK 3

WEEK 4-6

WEEK 7

PHASE 01

Base Conditioning

PHASE 02

Strength

PHASE 03

Endurance

PHASE 04

Deload (Peak)

PHASE 01

2 WEEKS | BASE CONDITIONING

Aim: Increase base strength, endurance, general fitness and develop supportive skills.



PHASE 02

1 WEEK | STRENGTH

Aim: Increase max strength and develop associated skills, whilst maintaining endurance.



PHASE 03

3 WEEKS | ENDURANCE

Aim: Increase endurance and develop associated skills, whilst maintaining strength.



PHASE 04

1 WEEK | DELOAD (PEAK)

Aim: To recover for performance period or next training cycle.



PHASE 01

2 WEEKS | BASE CONDITIONING



PHASE 01 **BASE** CONDITIONING

2 WEEKS | TAKE 2 REST DAYS BEFORE STARTING



TRACK YOUR PROGRESS! CLICK ON EACH DAY TO CHECK IT OFF WHEN YOU COMPLETE IT

START DATE:

WEEK 1:

WEEK 2:

SESSION:

		OPTION 1: Free Session: Your choice, eg. general bouldering or ropes session at the gym or home hangboard session.
		OPTION 1: Free Session: Your choice, eg. general bouldering or ropes session at the gym or climb on rock.

HOME TRAINING OPTIONS:

If you miss a climbing session and wish to train at home, see [general advice for hangboard training](#).



PHASE 02

1 WEEK | STRENGTH

STRENGTH GUIDE

INTRODUCTION TO STRENGTH TRAINING

Specific strength and power are required in climbing when executing the cruxes of routes or hard boulder problems. The main emphasis is on the fingers, arms and core. The routines in your plan will target your goals, strengths and weaknesses. Session plans contain advice on how to perform each routine.

SAFETY NOTES

- A thorough warm-up is crucial. Warm-up plans are provided.
- Be aware of form when training.
- Don't attempt a session if feeling overly stressed or fatigued. Rest or do an easier, endurance-based session instead.
- In project sessions, be wary of trying the same move repeatedly for too long. Alternate between different moves when working a project. Be prepared to call time and move on, even if you feel close.
- Certain holds and moves represent a higher potential risk for injuries, eg: sharp pockets, 'micro-edges' slopers (if slapping the same one repeatedly) or shoulder-intense moves such as press-moves when the arms are spread wide. Don't avoid these holds or moves but treat them with caution: ease into the move by testing the load, don't work the move for too long. Be ready to let go suddenly.

TECHNIQUE TIPS FOR STRENGTH SESSIONS

- *Refine your beta* - try out different sequences, make every attempt to grip handholds the best way and try alternative foot-sequences.
- *Dynamic movement* - focus on generating momentum (eg more push from the feet or swing from the hips).
- *Gripping* - experiment with different methods of gripping the holds, half-crimp, full-crimp, open, use of the thumb etc.
- *Accuracy* - practice catching holds first time, in exactly the right place during dynamic moves.
- *Core tension* - practice tensing your core and pressing your toes into small footholds.
- *'Front-on versus side-on'* - sometimes it's better to twist in and use the outside edge of your foot or drop-knee and other times it's better to climb with hips parallel. Try out both options.



MIND DRILLS FOR STRENGTH SESSIONS

- Use *visualisation* in your rest periods. Imagine yourself powering up the route in control. Imagine how each hold feels, the friction on your skin, the tension in your muscles and tendons, the pressure you put on your feet etc. Don't imagine it being too easy – it should feel hard but you still do it!
- *Belief* – a route problem can feel impossible when you're failing on it, and we're often too quick to tell ourselves we're not strong enough. Then a micro-adjustment to the beta will unlock things. Keep an open mind. You can do it!
- *Body language* - hold your head up and talk to yourself positively in a way that makes you feel strong and confident.

PHASE 02 STRENGTH

1 WEEK | TAKE 2 REST DAYS BEFORE STARTING



TRACK YOUR PROGRESS! CLICK ON EACH DAY TO CHECK IT OFF WHEN YOU COMPLETE IT

START DATE:

	OPTION 1: Free Session: Your choice, eg. general bouldering or ropes session at the gym or home hangboard session.

HOME TRAINING OPTIONS:

If you miss a climbing session and wish to train at home, see [general advice for hangboard training](#).



PHASE 03

3 WEEKS | ENDURANCE



ENDURANCE GUIDE

INTRODUCTION TO ENDURANCE TRAINING

Climbing endurance can take many forms, whether it's the ability to climb sustained sections on routes, shake-out on rests, recover in between climbs or last-out for an entire day's climbing. The routines in your plan will train the range of required energy systems.

Session plans contain detailed advice on how to perform each routine. Most are based on an interval training structure where exercises or climbs need to be performed for a specified number of times and with a specified rest interval.

The purpose of this section is to provide supportive background info on tactics, technique and mental tips.

TACTICAL TIPS FOR ENDURANCE SESSIONS

Performing multiple laps on auto belay routes

ALWAYS SAFETY-CHECK YOURSELF before each climb.

In long-endurance sessions you will need to climb routes several times consecutively.

Lowering off - In some cases, you'll be advised to lower off (as opposed to climbing down). In this case, on reaching the ground, simply climb again immediately.

Downclimbing - In some sessions you will be advised to climb down, either by following an easier route or 'rainbowing' (using any colour) if an easier route isn't available. On reaching the ground, don't step off the wall and simply climb back up again.



TECHNIQUE TIPS FOR ENDURANCE SESSIONS

- Pay particular attention to maintaining form towards the end of the session as fatigue starts to kick in.
- Focus on making accurate foot placements when pumped and maintaining smooth, fluid, movement.
- Practice moving dynamically when fatigued.
- Be aware of pace and try to find the middle ground - too fast will mean that you rush and make mistakes, whereas too slow will be inefficient.
- Breathe deeply and regularly, especially when resting.
- Simulate clipping by stopping every third or fourth hand-move and taking a hand off the wall for 3 or 4 seconds.
- *Route reading* – plan your sequence first. Identify all the holds and plan the hand sequence. Then make a note of the footholds and make a loose and flexible plan for how/when they'll be used. After climbing the problem, review your work to see if you guessed correctly.
- *Feedback* - If a climb doesn't go well then analyse your mistakes and learn from them.

MIND DRILLS FOR ENDURANCE SESSIONS

- Practice clearing your mind before going for each climb. Focus on executing each move and staying in the present.
- Explore the optimum mind-set for hard endurance climbing. You need to be relaxed, yet at the same time, aggressively determined.
- Enjoy the sensation of being under stress, as this is when we learn the most. Teach yourself to be calm when the pump kicks in.

PHASE 03 ENDURANCE

WATCH VIDEO →

3 WEEKS | TAKE 2 REST DAYS BEFORE STARTING



TRACK YOUR PROGRESS! CLICK ON EACH DAY TO CHECK IT OFF WHEN YOU COMPLETE IT

START DATE:

WEEK 1: WEEK 2: WEEK 3: SESSION:

			OPTION 1: Free Session: Your choice, eg. general bouldering or ropes session at the gym or home hangboard session.
			OPTION 1: Free Session: Your choice, eg. general bouldering or ropes session at the gym or climb on rock.

HOME TRAINING OPTIONS:

If you miss a climbing session and wish to train at home, see [general advice for hangboard training](#).



DELOAD WEEKS

RECOVERING BETWEEN PHASES AND AFTER THE PLAN

- **AIM:** To recover for performance period or next training cycle. You don't need to take a 'deload' (rest) week between phases. Simply take 1 rest day if feeling fresh or 2 rest days if feeling slightly fatigued and move on to the next phase.
- At the end of the plan you will achieve the best results if you take a deload week before resuming climbing at a high level. See [Conclusion and Next Steps](#).

SESSION INDEX

- WARM-UP 1 - FLOOR ROUTINE FOR ALL SESSIONS
- WARM-UP 2 - CLIMBING PROGRESSION FOR ROUTES / AUTO BELAY SESSIONS
- WARM DOWN

CONDITIONING

- CONDITIONING SESSION 1: ANTAGONISTS - BASE CONDITIONING / STRENGTH / ENDURANCE
- CONDITIONING SESSION 2: CARDIO & FLEXIBILITY

STRENGTH

- STRENGTH SESSION 1: ROUTES / AUTO BELAY - STRENGTH/POWER - HARD PROJECTS
- STRENGTH SESSION 2: BOULDERING - STRENGTH/POWER - PROJECTS

ENDURANCE

- ENDURANCE SESSION 1: ROUTES / AUTO BELAY - POWER-ENDURANCE - VOLUME PYRAMID
- ENDURANCE SESSION 2: ROUTES / AUTO BELAY - POWER-ENDURANCE - FIXED INTERVAL
- ENDURANCE SESSION 3: ROUTES / AUTO BELAY - LONG-ENDURANCE - FIXED INTERVAL
- ENDURANCE SESSION 4: ROUTES / AUTO BELAY - AEROBIC CAPACITY - PYRAMID
- ENDURANCE SESSION 5: BOULDERING - POWER-ENDURANCE - VOLUME PYRAMID

HOME TRAINING

- HANGBOARDING - GENERAL ADVICE

WARM-UP 1

FLOOR ROUTINE FOR ALL SESSIONS

AIM: To loosen your muscles and promote blood-flow prior to climbing.

DURATION: Approx. 8 - 10 mins

NOTE: This is the first part of the warm-up only! You must then move onto the second part, ie: climbing progressions given for routes / auto belay. To warm-up for bouldering, general advice is given in each session.

01

PULSE RAISER

(3 mins)

Select ONE of the following options:

- 2 - 3 mins light cardio, eg: treadmill or jog-on-the-spot, exercise bike.
- 3 sets of 5 - 10 burpees (squat-thrust > press-up > star jump) with 45 - 60 secs rest in between
- 3 sets of 30 secs of skipping with 45 - 60 secs rest in between

02

MOBILITY EXERCISES

(3 mins)

Do 3 x 30 secs of each of the following using slow, controlled form

- *Arm circles with finger clenches*
- *Leg swings*

03

STRETCH BAND

(3 mins)

Optional - choose your own exercises - focus on the shoulders

WARM-UP 2

CLIMBING PROGRESSION ROUTES/ AUTO BELAY SESSIONS

AIM: You will be climbing a series of easy routes with a timed rest in between. The aim is not to get up to your peak onsight grade but a grade-or-so below.

DURATION: Approx. 15 - 20 mins

NOTE: You will need to adapt this warm-up to your level by selecting the appropriate grades. See advice given for 'Feel of Training' below.

KEY TECHNIQUE PROMPTS:

- Place your feet accurately and make smooth, fluid, controlled movements.
- Relax your grip and breathe deeply and regularly.

01

02

03

ROUTE 1 - 'VERY EASY'

- Suggested Angle: Vertical
- Feel of Training: Zero pump in the forearms. Eg. '10% effort'
- Rest 3 mins

ROUTE 2 - 'EASY'

- Suggested Angle: Vertical
- Feel of Training: Very slight pump in the forearms. Eg. '30-40% effort'
- Rest 4 mins

ROUTE 3 - MODERATE

- Suggested Angle: Vertical or gently overhanging.
- Feel of Training: moderate pump in the forearms. Eg. '50-60% effort'
- Rest 5 mins
- Move on to main session

WARM DOWN

AIM: To relax your muscles after training in order to reduce post-training soreness and promote recovery.

DURATION: Approx. 4 - 8 mins

01

EASY ROUTE - AUTO BELAY

- 1 x very easy route (the same grade as your first warm-up)
- Move slowly and in control, relaxing your muscles as you go.

02

STRETCHING

Hold each of the following stretches shown below for 15 - 20 seconds each. Move from one to the next, then repeat the sequence again if you have time.



CONDITIONING SESSION 1: ANTAGONISTS



BASE CONDITIONING / STRENGTH / ENDURANCE

AIM: To strengthen the opposition muscles and develop a robust physique, which is more resistant to injury.

The session includes protocols (rep/set guidelines) for base strength (to be performed during Phase 1), strength (to be performed during Phase 2) and endurance (to be performed during Phase 3)

DURATION: Approx 45 mins (including warm-up & down).

TRAINING FACILITIES / EQUIPMENT:

A rubber forearm extensor trainer is the only essential item of training equipment

- Option 1: Floor routine
- Option 2: Suspension straps
- Option 3: Multi-gym or free-weights gym with a bench.

NOTE: This session has been presented in a fairly a loose format to give you the freedom to use different facilities. You will need to adapt it to your level. See advice given for 'Feel of the training'.

FEEL OF THE TRAINING: 85-90% effort. Each set should be completed comfortably, as if you could have done another rep or two. Don't push to failure or the point where form deteriorates.





IMPORTANT SAFETY ADVICE

Try to use controlled form on all exercises.

It is beyond the scope of this training plan to provide detailed safety information for weight training and suspension training. If you are unsure how to train then seek appropriate guidance (for example, book an induction at a gym), alternatively do the floor routine.

Those who are new to suspension training should perform exercises kneeling and at a low load level so as to learn the movement.

01

02

Start by determining the appropriate routine for the Phase you're in. Then choose one of the Exercise options below based on 1.) The equipment available to you and 2.) What appeals most to you.

PHASE 1: BASE CONDITIONING ROUTINE

Do 5 sets of 10 – 15 reps for each exercise with 3 mins rest between sets. Stop 1 – 2 reps before failure in each set.

EXERCISES

OPTION 1 - FLOOR:

- Push-ups (standard-width arm spacing)
- Forearm extensions
- Push-ups (Narrow-width arm spacing)
- Crunch sit-ups

To make push-ups harder, wear a weight vest. To make them easier, perform kneeling.

To make crunch sit-ups harder, carry a weight across your chest or do them more slowly. To make them easier do them more quickly.

PHASE 2: STRENGTH ROUTINE

Do 6 sets of 4 – 6 reps for each exercise with 3 mins rest between sets. Stop 1 rep before failure in each set.

OPTION 2 - SUSPENSION STRAPS:

- T's
- Forearm extensions
- Push-ups (standard-width arm spacing)
- Crunch sit-ups

To make suspension exercises harder, lower the handles and/or do the exercises on your toes.

To make them easier, raise the handles and/or perform kneeling.

To make crunch sit-ups harder, carry a weight across your chest or do them more slowly. To make them easier do them more quickly.

PHASE 3: ENDURANCE ROUTINE

Do 5 sets of 20 – 25 reps for each exercise with 3 mins rest between sets. Stop 1 – 2 reps before failure in each set.

OPTION 3 - WEIGHTS:

- Bench-press
- Forearm extensions
- Shoulder-press (aka military press)
- Crunch sit-ups

To make weights exercises harder, add weight vest. To make them easier, reduce weight.

To make crunch sit-ups harder, carry a weight across your chest or do them more slowly. To make them easier do them more quickly.

03



CONDITIONING SESSION 2: CARDIO & FLEXIBILITY

AIM: To build a base of general, aerobic fitness to enhance your climbing endurance and improve your flexibility to support your technique.

DURATION: 30 mins - 1 hrs 30 mins (including warm-up).

TRAINING VENUES/EQUIPMENT: Home, multi-gym or open space.

FEEL OF THE TRAINING: This is a light session aimed at promoting recovery between climbing sessions.

01

WARM-UP

Light Cardio 25 – 35 mins (medium intensity)
Eg. Running or cycling.
Don't push too hard, aim for 50 – 75% effort.

02

SESSION: FLEXIBILITY 20-30 MINUTES

From the stretches on the next two pages, pick a selection of stretches for the lower and upper limbs (eg. 3 or 4 for each).

Hold each stretch for 20 secs and repeat a second time.

GO CAREFULLY! Don't force too hard.

The stretches listed are aimed at those who are new to flexibility training. Seek further advice from a coach if you aren't sure how to do them correctly.

LOWER-LIMB



HAMSTRING
(Eg. Touch Toes or Downward Dog)



QUADRICEP



STEP-UP STRETCH
(Hold Leg with Arm for 10 secs >
Then Let Go and Try to Keep it up
for 10 secs)



CALVES



FROG STRETCH
(Standing)



GROIN
(Sideways)



GROIN
(Front-ways)

UPPER-LIMB



STRENGTH SESSION 1: ROUTES/AUTO BELAY



STRENGTH / POWER - HARD PROJECTS

AIM: By working a hard project over a series of sessions you will be training the ability to make hard moves and link them together, as well as refining key associated movement, tactical and mental skills.

ENERGY SYSTEMS TRAINED: Initial sessions will train strength and subsequent sessions will train power endurance.

DURATION: Approx 2 hrs 45 mins (including warm-up & down)

TRAINING FACILITIES: Auto belay wall (suggested angle range: vertical – 15 degrees overhanging).

NOTE: You will need to adapt this session to your level. See advice given for 'Feel of the training' and 'Grade selection'.

FEEL OF THE TRAINING: 'High quality'. Rest a long time between attempts to avoid or minimize cumulative fatigue. Maximum effort for each attempt.



01

WARM-UP:

First do WARM-UP 1 (floor routine) and WARM-UP 2 (climbing progression) given previously.

02

SESSION:

Select a very hard route (or two different routes) to work over a series of sessions.

GRADE SELECTION: Your redpoint limit (ie: something on which you can only just manage 3 - 6 moves at a time on your first working go and which you estimate will take at least 2 or 3 sessions to complete).

For the first session the aim is simply to do all the moves and to climb the route in, say, thirds or quarters.

HOW TO WORK A PROJECT ON AUTO BELAY:



Try the first few moves, then when you fall off, lower down to the ground and rest 2 - 4 mins. You can either try the first moves again (if you need to

re-work them) or if you're happy with your method then skip these moves by climbing up the easiest possible route on the same line (or 'rainbow' / use any colour) to get to your previous high-point.

For the first session the aim is simply to Then work the next few moves and when you fall off, lower down to the ground, rest 2 - 4 mins or slightly longer and so on.

For the first session the aim is simply to You will almost certainly find that you need to rest longer between climbing stints as the session progresses and when you are working the top part of the project route. It is best to split the session into chunks of time where you work the route fairly continuously for, say, 15 mins, then take a 15-20 minute break. This will enable you to sustain productivity for longer and will also allow other gym users access to the same line. A suggestion for a 2 hour session is to do 3 or 4 x 15 minute stints in total, split with 15-20 minute rests.

For the first session the aim is simply to In subsequent sessions, once you're able to perform longer links then after warming up, start with a 10 - 15 min go, where you do it in short sections to refamiliarize with the moves.

A grayscale photograph of a person climbing a rock wall. The climber is positioned in the center, reaching up to a hold. The wall is covered in various shaped holds and bolts. The background is a dark, textured wall.

02

(CONTINUED):

Then have 4 or 5 attempts at longer links (or redpoint attempts) with 15 - 20 min rests in between each attempt. Always push to failure on each link/redpoint and try your best to go further each time.

03

WARM DOWN

ADJUSTING THE SESSION:

- If you can't do more than 1 or 2 moves at a time on the route after the first session then leave it and go for something the grade below next session.
- If you do the route or get close to the top in the first session then go for the grade above next time.

KEY TECHNIQUE PROMPTS

- Practice reading the route from the ground in order to save energy when working out the moves.
- Focus on executing each sequence as quickly and efficiently as possible.

FUTURE TARGETS

Simply try to get further on the project each session. If you do it then replace it with a new harder one; however, don't worry if you don't do it! The point of these sessions is to teach yourself to adapt to much harder climbing than you're used to. Be patient and enjoy the process of climbing hard moves rather than focusing on the end result of getting to the top. If you find that you start to stagnate mentally after a few sessions then switch to a different route of a similar level.

STRENGTH SESSION 2: BOULDERING



STRENGTH / POWER - HARD PROJECTS

AIM: By working several different hard boulder projects over a series of sessions you will be training the ability to make hard moves and link them together, as well as refining key associated movement, tactical and mental skills.

ENERGY SYSTEMS TRAINED:

Strength/power

DURATION: Approx 2 hrs 45 mins (including warm-up & down)

TRAINING FACILITIES: Bouldering wall and/or woody-board

NOTE: This session has been presented in a fairly a loose format to give you the freedom to choose what you would like to do. You will need to adapt it to your level. See advice given for 'Feel of the training' and 'Grade selection'.

FEEL OF THE TRAINING: 'High quality'. Rest a long time between attempts to avoid cumulative fatigue. Maximum effort for each attempt.



01

WARM-UP

First do WARM-UP 1 (floor routine)

Instead of doing WARM-UP 2, do some climbing progressions on easy boulder problems.

02

SESSION

Select 3 or 4 hard boulder problems to work over a series of sessions.

GRADE SELECTION: Your 'project limit', ie: something on which you can only just manage 2 - 3 moves at a time on your first working go and which you estimate will take at least 2 - 3 sessions to complete.

SUGGESTED STYLE: Overhanging eg: 15 - 30 degrees. Select problems of contrasting styles with different types of moves and holds; for example, one

IE: build up slowly through the grade bands (eg, do 3 or 4 V0-1s with 1 min rest in between then 3 or 4 V1-2s with 1.5 mins rest in between and so on) until you reach your peak grade. Don't go too fast and make sure that you rest long enough to avoid getting pumped.

problem could be on crimps and small, positive edges another could be on pinches and slopers and another could be steeper, with big powerful moves on big holds. Include a slab or vertical problem.

Spend a block of time (for example 30 - 35 mins) on each problem. Do not work a problem for longer than 40 mins. In the first session, work the moves, taking good rests between goes, then in subsequent sessions, attempt to link each problem in its entirety.

03

WARM DOWN

ADJUSTING THE SESSION:

If you can't do individual moves on a problem then leave it and go for something the grade below.

FUTURE TARGETS

If you do a problem or do it in 2 or 3 tries then replace it with a harder problem next time.

ENDURANCE SESSION 1:

ROUTES/AUTO BELAY



POWER-ENDURANCE – VOLUME PYRAMID

AIM: You will be climbing routes one-at-a-time, with fixed rests in between. The routes are grouped into grade blocks, which ascend and then descend in difficulty. This session will train power-endurance for sport climbing, whilst also refining key movement and mental skills.

ENERGY SYSTEMS TRAINED:

Anaerobic / aerobic.

DURATION: Approx 2 hrs 45 mins (including warm-up & down).

TRAINING FACILITIES: Auto belay wall (suggested angle range: vertical - 15 degrees overhanging).

NOTE: You will need to adapt this session to your level. See advice given for 'Grade selection' and 'Feel of the training'.

FEEL OF THE TRAINING: You should feel extremely powered-out and pumped by the end of the session. Overall effort level: 95-100%



01

WARM-UP

First do WARM-UP 1 (floor routine) and WARM-UP 2 (climbing progression) given previously.

02

1ST GRADE BLOCK – ‘MODERATE’

- Suggested Angle: Vertical or gently overhanging (on medium/large holds)
- 3 or 4 routes of the same grade with 4-5 mins rest in between
- Feel of Training: moderately pump in the forearms. Eg. 50-60% effort
- Grade Selection: 2 or 3 grades below your onsight limit grade
- You should complete the block fairly comfortably
- Rest after block 6 mins

03

2ND GRADE BLOCK – ‘MODERATE/HARD’

- Suggested Angle: Vertical or gently overhanging (on medium holds)
- 2 or 3 routes of the same grade with 5-6 mins rest in between
- Feel of Training: pumped in the forearms. Eg. 70-80% effort
- Grade Selection: 1 or 2 grades below your onsight limit grade
- You should complete the block with some effort!
- Rest after block 8 mins

04

3RD GRADE BLOCK – ‘HARD’

- Suggested Angle: Vertical or gently overhanging (on small/medium holds)
- 1 or 2 routes of the same grade with 6-8 mins rest in between
- Grade Selection: your onsight limit grade
- Feel of Training: moderately pump in the forearms. Eg. 90-95% effort
- You should aim to complete the work with an all-out fight or possibly fail near the top of the climb.
- Rest after block 10 mins



05

4TH GRADE BLOCK – AS FOR BLOCK 3

06

5TH GRADE BLOCK – AS FOR BLOCK 3

07

6TH GRADE BLOCK – AS FOR BLOCK 2

- Same grades, number of climbs and rest times as block 2 but the effort level should feel much harder now!
- You can repeat the routes you did previously if further options aren't available.
- You should aim to complete the work with an all-out fight or fail on the last climb or two.

08

7TH GRADE BLOCK – AS FOR BLOCK 1

- Same grades, number of climbs and rest times as block 1 but the effort level should feel much harder now!
- You can repeat the routes you did previously if further options aren't available.
- You should aim to complete the work with an all-out fight or fail on the last climb or two.

09

WARM DOWN

KEY TECHNIQUE PROMPTS

- This is a great session to work onsighting skills, so try new routes if they are available.
- Pay attention to maintaining accurate footwork and smooth movements when feeling fatigued. See Adjusting Your Pacing video below.





ADJUSTING THE SESSION

- **Making it easier:** Reduce the grades and/or lengthen the rest times between climbs and/or between blocks
- **Making it harder:** Increase the grades of all or some of the climbs in each block.

FUTURE TARGETS

Once you've completed the work, make the session harder as follows:

1. Repeat the hardest block another time.
2. Make one or more of the climbs in each block a grade harder until, eventually all the climbs in each block are a grade harder (ie: the grade of the new block 1 is the same as the previous block 2).

ENDURANCE SESSION 2:

ROUTES/AUTO BELAY



POWER-ENDURANCE — FIXED INTERVAL

AIM: This session will train power-endurance for sport climbing, whilst refining key movement and mental skills.

ENERGY SYSTEMS TRAINED:
Anaerobic.

DURATION: Approx 2 hrs 30 mins
(including warm-up & down).

TRAINING FACILITIES: Auto
belay wall (suggested angle range:
vertical – 15 degrees overhanging).

NOTE: You will need to adapt this
session to your level. See advice given
for 'Grade selection' and 'Feel of the
training'.

FEEL OF THE TRAINING: You
should feel extremely powered-out
and pumped by the end of the session.
Overall effort level: 95 - 100%.

01

WARM-UP

First do WARM-UP 1 (floor routine) and WARM-UP 2 (climbing progression) given previously.

02

SESSION

- You will be climbing a route (or different routes of the same grade), one-at-a-time, with a fixed rest interval between each climb, as specified.
- Grade selection: Eg. your onsight limit or one grade below
- Style of route: Vertical or gently overhanging
- Rest between climbs: 10 – 12 mins
- Target number of climbs: 8 - 10
- Feel of the training: The first three climbs should feel relatively comfortable, the next two will feel tough and from then on it should be an all-out fight. You should aim to hit failure from the 5th climb onwards.

TRAINING TIPS

- For variety, try to use 2 or 3 different routes of the same grade on rotation, rather than repeating the same route.
- It is best to train on routes that you are familiar with. If you don't know the routes then test them out after your warm-up.

KEY TECHNIQUE PROMPTS

- Pay attention to maintaining accurate footwork and smooth movements when feeling fatigued.



03

WARM DOWN



ADJUSTING THE SESSION

- Making it easier: if you manage the climb less than 4 times, reduce the grade and/or lengthen the rest times between climbs.
- Making it harder: If you do 10 blocks comfortably then simply increase the grade or use the target sequence below.

FUTURE TARGETS

Once you've completed the work, make the session harder as follows:

1. Reduce the rest between each climb by 1 - 2 mins.
2. Put the rest time back up to the original level and for the 3rd & 4th climb, try a route the next grade up.
3. As for target 2 but do a route that is 1 grade harder than the original climb on the 2nd, 3rd, 4th & 5th climbs.

ENDURANCE SESSION 3:

ROUTES/AUTO BELAY



LONG-ENDURANCE — FIXED INTERVAL

AIM: This session will train endurance for longer sport climbs and trad, whilst refining key movement and mental skills.

ENERGY SYSTEMS TRAINED: Anaerobic / Aerobic. You should feel extremely pumped by the end of the session. Overall effort level: 90 - 95%.

DURATION: Approx 2 hrs 45 mins (including warm-up & down).

TRAINING FACILITIES: Auto belay wall (suggested angle range: vertical – 10 degrees overhanging).

NOTE: You will need to adapt this session to your level. See advice given for 'Grade selection' and 'Feel of the training'.

FEEL OF THE TRAINING: You should feel extremely pumped by the end of the session. Overall effort level: 95 - 100%.


01

WARM-UP

First do WARM-UP 1 (floor routine) and WARM-UP 2 (climbing progression) given previously.

02

SESSION

- You will be climbing routes of the same grade in blocks of two or three at-a-time with no rest in between, followed by a fixed rest interval after each block.
 - **Number of consecutive climbs in each block:** this will depend on the height of your climbing gym, as follows:
 - Climbing gyms with routes up to 14m/ 46ft: climb routes 3 times consecutively. IE: do 'triple laps'.
 - Climbing gyms with routes higher than 14m/ 46ft: climb routes twice consecutively. IE: do 'double laps'.
 - **Grade Selection:** The grade of individual routes to be lapped should be approximately 3 grades below your onsight limit for one route. However, this will vary for the individual, so you will need to experiment to set the level correctly.
 - **Approx overall grade of link-up:** The combined 'link-up grade' should feel the equivalent to your onsight limit.
 - **Style of route:** Vertical or gently overhanging on positive holds.
- 
- Rest between climbs in each set: Zero / as-little-as-possible! Lower-off (don't downclimb) and get straight back on.
 - Rest between blocks: 15 mins
 - Target number of blocks: 6 - 7
 - **Feel of the training:** The first three blocks should feel relatively comfortable, the fourth block will feel tough and from then on it should be an all-out fight. You should aim to hit failure from the 4th block onwards.



ADJUSTING THE SESSION

- Making it easier: if you manage less than 3 blocks, reduce the grade of the individual climbs in each block.
- Making it harder: If you do 7 blocks comfortably then simply increase the grade of the routes or use the target sequence below.

FUTURE TARGETS

Once you've completed the work, make the session harder as follows:

1. Reduce the rest between each block by 2 - 3 mins.
2. Put the rest time back up to the original level and make the first climb in each block a grade harder.
3. Make the second (and if relevant, the third) climb in each block a grade harder.

ENDURANCE SESSION 4:

ROUTES/AUTO BELAY



AEROBIC CAPACITY – PYRAMID

AIM: To perform long, very easy stints of climbing in order to improve the ability to rest on longer climbs, as well as associated movement and mental skills.

ENERGY SYSTEM TRAINED:
Aerobic.

DURATION: Approx 2 hrs (including warm-up & down).

TRAINING FACILITIES: Auto belay wall (suggested angle range: vertical).

NOTE: You will need to adapt this session to your level. See advice given for 'Feel of the training'.

FEEL OF THE TRAINING:
These are easy 'active rest' sessions. You should feel very mildly pumped towards the end. Overall effort level: 40-50%.



01

WARM-UP

First do WARM-UP 1 (floor routine)

There is no need to do Warm-up 2 (climbing progressions) as this is incorporated into the session

02

SESSION

Climb up an easy route and then down-climb an even easier one, or 'rainbow' (use any colour) to climb down. If you find climbing down too difficult then lower-off and climb again immediately. Aim to tolerate a very mild 20-30% pump, occasionally pushing slightly harder to say, 40-50% but then backing off to allow the pump to clear. Make the effort-level similar on each set.

FUTURE TARGETS:

Don't be tempted to push too hard, however you can try increasing the length of each climbing stint by 30 secs every session or one minute on alternate sessions. Don't make the climbing significantly harder.

KEY TECHNIQUE PROMPTS:

- Be aware of the pump in your forearms and practice shaking out.
- Breathe deeply and at a steady rate.
- Stay relaxed, calm and focused.

SET NO:	DURATION OF CLIMBING SET:	REST AFTER SET:
1		5 MINS
2	8 MINS	8 MINS
3	10 MINS	10 MINS
4	12 MINS	12 MINS
5	10 MINS	10 MINS
6	8 MINS	8 MINS
7	5 MINS	END

03

WARM DOWN

ENDURANCE SESSION 5:

BOULDER INTERVALS



POWER ENDURANCE — PYRAMID

AIM: To repeat boulder problems in blocks in a pyramid structure in order to train strength and endurance for long boulder sessions and sport climbing, as well as refining key associated movement and tactical skills.

DURATION: Approx 2 hrs 45 mins (including warm-up & down).

TRAINING FACILITIES:
Bouldering wall and/or woody-board.

NOTE: This session has been presented in a fairly loose format to give you the freedom to choose what you would like to do. You will need to adapt it to your level. See advice given for 'Grade Selection' and 'Feel of the training'.

FEEL OF THE TRAINING:
Extremely powered-out and pumped towards the end. 90 - 95% effort.

01

WARM-UP

First do WARM-UP 1 (floor routine)

Instead of doing WARM-UP 2, do some climbing progressions on easy boulder problems. Eg. Do 3 or 4 problems at the lowest grade band (eg V0-1) and the

grade above that (eg. V1-2) with approx 1 min rest in between each problem. Don't go too high up the grades as you're not aiming for hard, project-level problems in this session.

02

SESSION

- Climb a series of boulder problems grouped into blocks with fixed rest times between each problem and a longer rest after the block. The grades could either stay approximately the same or gradually increase and then decrease. It usually makes sense to take longer rests between the harder problems (for example, easier problems can be climbed almost continuously / back-to-back, whereas you may wish to rest 1 - 2 mins between harder problems.
- Grade Selection: typically, the grade range of problems will be somewhere between your second warm-ups and your flash limit. You should aim to do most of the problems on your first-go or in 2 goes maximum.
- Try to select problems across a wide range of styles and different wall angles.

03

WARM DOWN

ADJUSTING THE SESSION AND FUTURE TARGETS:

- If you burn out in the first block or two and find that your productivity goes down in the remainder of the session then drop the grades and/or lengthen the rest times between problems and/or blocks.
- If you complete the session then next time, try harder problems in one of more of the blocks or take slightly longer rests between problems and/or blocks.



HOME TRAINING: HANGBOARDING

GENERAL ADVICE

It is not necessary to use a hangboard whilst following this training plan. However, if you're unable to get to the climbing gym then a home hangboard session represents a great option to prevent missing out on training.

It's beyond the scope of this plan to provide detailed protocols and safety info for hangboarding but brief guidelines are given below. If you're new to hangboarding it's advisable to check in with a coach before starting.



01

02

WARM-UP

Always warm-up first, starting with a floor routine, then moving on to easy hangs on large holds with foot-assistance (standing on a chair or in an exercise strap). Reduce the level of foot assistance gradually with each hang/set. Build up gradually over 15 mins before starting the main training session.

SESSION

For the main session, favour base strength protocols (eg. hang for 7-secs-on-3-secs off OR 6-secs-on-4-secs off x 3 or 4 in-a-row to comprise one set).

- Do sets for two main grips: 4-finger half-crimp and 3-finger open/drag.
- Don't go to failure and instead, stop 1 - 2 secs beforehand.
- Rest approx 3 - 5 mins between sets.
- The number of sets will vary according to level and time available. 3 - 5 sets per grip is a loose guideline.
- Emphasize quality and maintain good form - don't slump onto straight arms, instead maintain a slight bend at the elbows and engage your shoulders.
- Ease the load onto your fingers gradually for each hang/set.
- Be alert and ready to let go immediately if you feel a tweaking sensation in your finger tendons or forearms.



A grayscale photograph of a person climbing a rock wall. The climber is on the left side of the frame, reaching up to a hold. The wall is covered in various sized holds and has ropes and pulleys attached to it. The background is dark and out of focus.

PLAN ADJUSTMENTS

ADAPTING THE SEQUENCES TO YOUR CHANGING SCHEDULE

In the weekly plans, the days are marked as 'day 1', 'day 2', 'day 3' etc, (instead of 'Monday', 'Tuesday' etc). It is presumed that day 1 will be a Monday and day 7 will be a Sunday; however, if your weekly schedule changes or you're unable to train for a few days then you can shift the sequences forwards or backwards so they fit.

IF YOU'RE SHORT ON TIME

It's always better to go do a short session than to do no training. In busy weeks, try your best to get to the climbing gym and you can shorten the sessions simply by doing less sets / climbs. In order to make the session feel challenging and to compensate for the reduction in volume, you can try increasing the difficulty of the work slightly (eg. trying harder grades) OR reducing recovery times slightly, but don't do both or you may over-cook things and the quality of the training will drop off. If you really can't get to the climbing gym then try to do a home hangboard session (see [general advice](#) on hangboarding given at the end of the plan).

OPTIONAL SESSIONS:

Occasionally a session may be marked as **optional*. You can skip this on busy weeks or at times when you feel exceptionally fatigued.



INTERCHANGING SESSIONS

The running-order of the climbing-based training sessions can be interchanged without compromising the overall effect. For example, you could swap the day 2 session with the day 4 session, meaning that you still end up doing the prescribed sessions for the week, but in a different order.

INCORPORATING BREAKS AND DISRUPTIONS DUE TO WORK/HOLIDAY

Don't worry if you miss the odd session but try not to miss more than 2 or 3 sessions consecutively. If you miss an entire week then repeat that week. If you go on holiday or a business trip then it is worth taking a portable hangboard and simply trading your prescribed climbing session with a hangboard session.

MONITORING RECOVERY AND MAKING ADJUSTMENTS DUE TO EXCESSIVE FATIGUE

There is a fine line between pushing on through healthy 'training tiredness' and depleting your system by ploughing on when you're excessively fatigued, either from training, work or both. Aim to maintain constant awareness of your recovery and overall energy levels and always to error on the side of caution.



MONITORING RECOVERY AND MAKING ADJUSTMENTS DUE TO EXCESSIVE FATIGUE (CONTINUED)

If you feel excessively tired then skip one of the prescribed sessions and add a rest day to allow your body extra time to catch up or do a light 'recovery session' (eg. warm-up, followed by 15 – 20 mins of very easy climbing on auto belay, then warm down).

QUALITY of training takes preference to quantity.

IMPORTANT - INCORPORATING BREAKS DUE TO INJURY OR ILLNESS

If you take a forced break through *minor* injury or illness, be sure to do a very light week of easy climbing to build back up (for example, see advice given for de-load weeks). You could then do one week of the Phase 1/Base Phase in order to build back up and then resume the plan where you left off.

If injury or illness persists or becomes more serious, **STOP TRAINING** and consult a physiotherapist and/or your GP.

FITTING IN OUTDOOR CLIMBING

You can break the plan at any point to go climbing on rock. If you really wish to perform at your best then take two rest days, even if this involves missing one of the prescribed training sessions. However, if you do this a lot then you may lose momentum in your training. If you go away on a slightly longer climbing trip (say a week in length) then simply break the plan and continue where you left off.



CONCLUSION & NEXT STEPS

AFTER THE PLAN – ‘PERFORMANCE PHASE’

After following the plan, your climbing performance will be at a peak. Use the next month or two to achieve your climbing goals. The aim is to stop hard, exhaustive training and to focus on performing. If you plan to climb outside on weekends then for your midweek gym sessions, simply climb/train intuitively rather than following a plan. Keep the quality high; for example, climb hard routes on auto belay with long rests in between. The aim is to promote recovery and a feeling of ‘sharpness’ so as to maximize your performance.

CONTINUING TRAINING

Avoid following the same program again, as your training will stagnate and you may risk injury. You can either attempt to refresh the program yourself or alternatively, contact Neil for a personalized plan at www.neilgresham.com and look out for more training plans from Head Rush Technologies in the future!



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