LAKE VESUVIUS BACKPACKING TRIP DIFFICULTY SNAPSHOT

Of course these ratings are only an indicator of hike difficulty - every hike has its variables beyond elevation gain and distance including weather, experience/fitness, unique trail conditions, starting/ending elevation, etc.

Five Rivers Outdoors reserves the right to refuse access to Five Rivers Outdoors trips.

LEVELS

Level I Easy, no prior backpacking experience needed, below average physical condition

Level II Moderate, some experience needed, average physical condition

Level III Challenging, some experience needed, good physical condition

Level IV Epic, some experience needed, excellent physical condition

Distance	Pace	Terrain	Elevation Gain	Physical Condition
> 13 mi.	very fast (2.5 mph or faster)	very strenuous	> 3500	Excellent
9-13 mi.	fast (2-2.5 mph)	strenuous	2500	Good
5-8 mi.	moderate (1.5-2 mph)	average	1500	Average
< 5 mi.	leisurely (< 1.5 mph)	easy	< 500	Below Average

DISTANCE

- Greater than 13 miles on the longest day of trip.
- 9-13 miles on the longest day of trip.
- 5-8 miles on the longest day of trip.
- Less than 5 miles on the longest day of trip.

PACE

VERY FAST (2.5 mph or faster)

You have to consciously push to stay on pace on average terrain.

One who is active at a *moderate* intensity level finds it difficult to carry a conversation even on average terrain.

FAST (2-2.5 mph)

You are consciously aware of your pace on average terrain and you must push yourself a little as it becomes more strenuous in order to stay on pace.

One who is active at a *moderate* intensity level struggles to carry a conversation even on average terrain.

MODERATE (1.5-2 mph)

Even casual walking on average terrain maintains the desired pace. You become consciously aware of your pace as it becomes more strenuous and you push yourself a bit to stay on pace when the terrain dictates the need.

One who is active at a *moderate* intensity level should be able to carry on a conversation comfortably on average terrain, but may be slightly winded on hills.

LEISURELY (< 1.5 mph)

You are not concerned about the distance or pace, you'll get there.

One who is active at a *moderate* intensity level can carry a tune if you wish or whistle while you walk on average terrain.

You should be able to be within you target heart rate for moderate-intensity physical activity no matter the pace.

Calculating your Target Heart Rate

For **moderate-intensity physical activity**, a person's target heart rate should be 50 to 70% of his or her maximum heart rate. This maximum rate is based on the person's age. An estimate of a person's maximum age-related heart rate can be obtained by subtracting the person's age from 220.

For example, for a 50-year-old person, the estimated maximum age-related heart rate would be calculated as 220 - 50 years = 170 beats per minute (bpm). The 50% and 70% levels would be:

50% level: 170 x 0.50 = 85 bpm, and
70% level: 170 x 0.70 = 119 bpm

Thus, moderate-intensity physical activity for a 50-year-old person will require that the heart rate remains between 85 and 119 bpm during physical activity.

Taking Your Heart Rate

Generally, to determine whether you are exercising within the heart rate target zone, you must stop exercising briefly to take your pulse.

You can take the pulse at the neck, the wrist, or the chest. We recommend the wrist. You can feel the radial pulse on the artery of the wrist in line with the thumb.

Place the tips of the index and middle fingers over the artery and press lightly.

Do not use the thumb.

Take a full 60-second count of the heartbeats, or take for 30 seconds and multiply by 2.

Start the count on a beat, which is counted as "zero." If this number falls between 85 and 119 bpm in the case of the 50-year-old person, he or she is active within the target range for moderate-intensity activity.

TERRAIN

VERY STRENUOUS

Rough terrain, exposure and/or bushwacking possible, MUST use your hands for progress but don't need to search for holds, long stretches (approximately 0.5 mile or more at a time) have roots, rocks, scree slopes, snow fields and trees in trail, boulder hopping, long stretches of trail (approximately 0.5 mile or more at a time) exceed 15% grade. Chest high river crossings could exist.

STRENUOUS

Narrow hiking trails, washed out tread, often roots, rocks, and trees in trail, occasional boulder hopping, some trail (0.25 mile at a time) exceeds 15% grade. Knee high creek crossings (10 feet wide) could exist.

AVERAGE

Maintained hiking trails, soft ground, sand, dirt/gravel road, occasional roots, rocks and trees in trail, most of trail is under 15% grade. Small creeks (less than 5 feet wide) are not bridged.

EASY

Solid pavement, sidewalk, crushed stone path, all water crossings are bridged

ELEVATION GAIN

- Greater than 3500 on the biggest elevation gain day of trip.
- 2500 on the biggest elevation gain day of trip.

- 1500 on the biggest elevation gain day of trip.

- Less than 500 on the biggest elevation gain day of trip.

PHYSICAL CONDITION

"Ultimately, I am what I choose to be; my self-esteem follows the same path."
— Anonymous

Physical fitness is defined as "a set of attributes that people have or achieve that relates to the ability to perform a physical activity"

Physical fitness has 5 main components that add up to make your personal physical fitness level. Cardio-respiratory endurance, muscular strength, muscular endurance, body composition, and flexibility.

EXCELLENT

You can jog 8 miles without stopping.
Harvard Step Test Score of > 90

GOOD

You can jog 5 miles without stopping.
Harvard Step Test Score of 80-89

AVERAGE

You can jog 2 miles/walk 5 miles on level pavement without stopping.
Harvard Step Test Score of 65-79

BELOW AVERAGE

You can jog 0.5 mile/walk 2 miles on level pavement without stopping.
Harvard Step Test Score of <55-64

HARVARD STEP TEST

The objective of this test is to monitor a person's cardiovascular system.

Procedure

The athlete steps up and down on the platform at a rate of 30 steps per minute for 5 minutes or until exhaustion. Exhaustion is defined as when the athlete cannot maintain the stepping rate for 15 seconds. The athlete immediately sits down on completion of the test, and the heartbeats are counted for 1 to 1.5 (1st pulse count), 2 to 2.5 (2nd pulse count), and 3 to 3.5 (3rd pulse count) minutes.

Equipment required

A Platform or step 20 inches (50.8 cm) high, stopwatch, metronome or cadence tape.

Scoring

The score is equal to (100 X test duration in seconds) divided by 2 X (total heartbeats in the recovery periods).

- Excellent > 90
- Good 80-89
- Average 65-79
- Below average <55-64

RESULTS SHEET

1. Time of Exercise: Seconds _____ X 100 = _____

2. 1st pulse count (A) _____

2nd pulse count (B) _____

3rd pulse count (C) _____

Add A, B, C to get total: _____ X 2 = _____

3. Divide the total of #1 by the total of #2 to get a total of _____

4. The total of #3 indicates a Harvard Step Test Score of_____

5. The score indicates a cardiovascular rating that is _____

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Physical Activity for Everyone: Components of Physical Fitness

"Ultimately, I am what I choose to be; my self-esteem follows the same path."
—Anonymous

What does it mean to be physically "fit?" Physical fitness is defined as "a set of attributes that people have or achieve that relates to the ability to perform physical activity" (USDHHS, 1996). In other words, it is more than being able to run a long distance or lift a lot of weight at the gym. Being fit is not defined only by what kind of activity you do, how long you do it, or at what level of intensity. While these are important measures of fitness, they only address single areas. Overall fitness is made up of five main components:

- Cardiorespiratory endurance
- Muscular strength
- Muscular endurance
- Body composition
- Flexibility

In order to assess your level of fitness, look at all five components together.

What is "cardiorespiratory endurance (cardiorespiratory fitness)?"

Cardiorespiratory endurance is the ability of the body's circulatory and respiratory systems to supply fuel during sustained physical activity (USDHHS, 1996 as adapted from Corbin & Lindsey, 1994). To improve your cardiorespiratory endurance, try activities that keep your heart rate elevated at a safe level for a sustained length of time such as walking, swimming, or bicycling. The activity you choose does not have to be strenuous to improve your cardiorespiratory endurance. Start slowly with an activity you enjoy, and gradually work up to a more intense pace.

What is "muscular strength?"

Muscular strength is the ability of the muscle to exert force during an activity (USDHHS, 1996 as adapted from Wilmore & Costill, 1994). The key to making your muscles stronger is working them against resistance, whether that be from weights or gravity. If you want to gain muscle strength, try exercises such as lifting weights or rapidly taking the stairs.

What is "muscular endurance?"

Muscular endurance is the ability of the muscle to continue to perform without fatigue (USDHHS, 1996 as adapted from Wilmore & Costill, 1994). To improve your muscle endurance, try cardiorespiratory activities such as walking, jogging, bicycling, or dancing.

What is "body composition?"

Body composition refers to the relative amount of muscle, fat, bone, and other vital parts of the body (USDHHS, 1996 as adapted from Corbin and Lindsey, 1994). A person's total body weight (what you see on the bathroom scale) may not change over time. But the bathroom scale does not assess how much of that body weight is fat and how much is lean mass (muscle, bone, tendons, and ligaments). Body composition is important to consider for health and managing your weight!

What is "flexibility?"

Flexibility is the range of motion around a joint (USDHHS, 1996 as adapted from Wilmore & Costill, 1994). Good flexibility in the joints can help prevent injuries through all stages of life. If you want to improve your flexibility, try activities that lengthen the muscles such as swimming or a basic stretching program.

References

U.S. Department of Health and Human Services. *Physical activity and health: a report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 1996.

Walking up stairs burns almost five times more calories than riding an elevator.

Time Depends on Intensity

Higher intensity activities require less time spent. Lower intensity activities require more time spent.

Light-Intensity Activities:

- Walking slowly
- Golf, powered cart
- Swimming, slow treading
- Gardening or pruning
- Bicycling, very light effort
- Dusting or vacuuming
- Conditioning exercise, light stretching or warm up

Moderate-Intensity Activities:

- Walking briskly
- Golf, pulling or carrying clubs
- Swimming, recreational
- Mowing lawn, power motor
- Tennis, doubles
- Bicycling 5 to 9 mph, level terrain, or with a few hills
- Scrubbing floors or washing windows
- Weight lifting, Nautilus machines or free weights

Vigorous-Intensity Activities:

- Racewalking, jogging or running
- Swimming laps
- Mowing lawn, hand mower
- Tennis, singles
- Bicycling more than 10 mph, or on steep uphill terrain
- Moving or pushing furniture
- Circuit training

Time Depends on Intensity