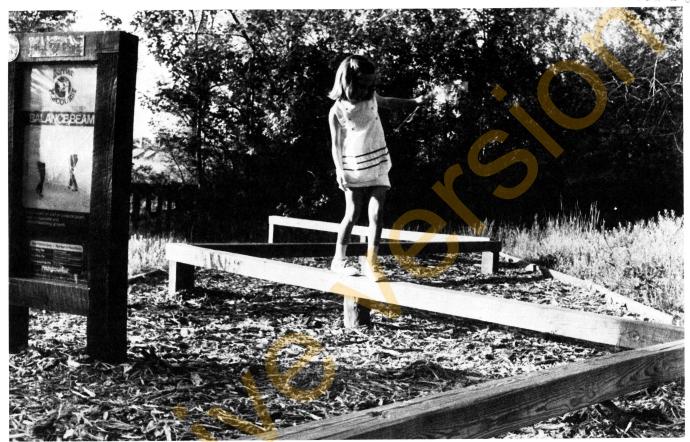


WILL RECREATION PARKS & LEISURE

University of Missouri-Columbia Extension Division



AT COLUMBIA'S OAKLAND PARK, this six-year-old tests her skill on the balance beam. It's one of the exercise stations on a one-mile trail. Rates are set for "sporting par" and "championship par."

Developing Exercise Trails

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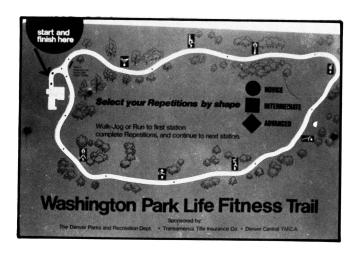
Exercise trails have become increasingly popular in parks and open areas because they provide many recreational opportunities for the user. Exercise trails combine environmental aesthetics with such physical exercise as jogging, hiking, or calisthenics.

The idea of combining calisthenics with hiking and running started in Switzerland during the late 1960's. The popularity of these courses has been enhanced by the recent research supporting the premise that physical fitness contributes to an individual's physical and emotional well-being.

WHAT IS AN EXERCISE TRAIL?

A fitness trail consists of a simple trail plus exercise stations. People may walk, jog, or hike around a predetermined course, and stop at different intervals to do various calisthenics and stretching exercises. Ideally, exercise trails are scientifically designed to begin with simple warm-up exercises, to progress along the course to more strenuous activities and end with simpler exercises at the last few stations.

Exercise trails provide users the opportunity to improve cardiovascular performance at their own rate.



This can best be measured by monitoring your own pulse rate. Everyone's heart has a maximum level of effectiveness. Exercising at such an intense pace that you constantly exert yourself beyond the maximum level can be dangerous. Individuals should exercise at 70-80 percent of their maximum pulse rate in order to achieve significant improvement.

You will get the best results and enjoy yourself much more if the following tips are taken when using fitness courses. First, use the trail frequently (3 times weekly is perfect). Take a day off or work-out in a different manner between exercise trail work-outs. After each work-out, cool down slowly and allow your pulse rate to return to normal. This can be done by taking a leisurely paced walk.

It is important to have a complete physical examination before starting any extensive exercise program.

DETERMINING YOUR WORK-OUT PULSE RATE

Generally, some specialists believe participants should not exceed an exercise intensity rate that keeps them from carrying on a conversation with another person. But the best approach is a physical examination by a local doctor.

Each person has a different level of physical fitness. The accompanying signs at each station should list the minimum and maximum number of repetitions for beginning and advanced fitness levels. Individuals can gradually improve their own condition by increasing their pace and/or the number of repetitions at each station. Exercise trails provide the opportunity for users to develop their cardiovascular fitness in a progressive manner.

THE TRAIL ENTRANCE

At the beginning of the trail, install a permanent instructional sign, providing users with information

about the course. Identify the agency that maintains the trail as well as any contributor to the project. Include a complete map of the trail; indicate total trail length and the types and number of exercise stations.

Instructional signs should be large enough to include instructions and illustrations of the prescribed exercise. The initial instructional sign should be large enough to outline trail procedures, discuss the purpose of the trail, and contain a clear map of the entire layout. The sign should be durable enough to withstand severe weather.

THE LAYOUT

Most make the trail into a loop or circle, beginning in a parking lot or similar location in a park.

Trail length can vary depending on the amount of land available for the course. Most run from one to two miles. A trail can be lengthened by having it cross back and intersect past portions. The amount of exercise intervals along the trail may vary between 10 and 20. However, this number is not critical and may be left up to the managing authority.

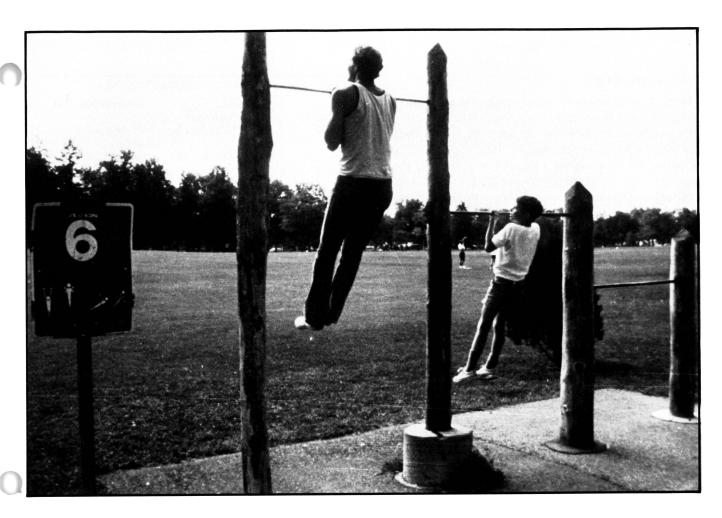
As users jog along the trail, they will approach various stations identified by signs. These signs will describe a particular exercise and suggest the number of repetitions for beginning and advanced fitness levels. The proper procedure necessary to safely complete the exercise should be clearly stated on each sign. Each interval should have the needed materials to partake in the described exercise. The exercise should be thoroughly illustrated on the sign.

Many exercise trails have roughly 100 yards between each station. This distance can be altered to fit the space and terrain of the available land. Obviously, it is not a good idea to have a strenuous exercise at a station after a steep hill.

The initial stations along the trail involve less strenuous exercises. Examples of such exercises include stretching calistenics like toe touches, jumping jacks, and calf stretches. As the user progresses along the trail, more strenuous exercises like push-ups, chin-ups, and squat thrusts are grouped together at stations along the middle of the course. Stations become less strenuous again toward the end of the trail.

If the trail is properly designed, and illustrations of the exercises are followed correctly, then participants will use all major muscle groups. Combining jogging or walking with calisthenics, makes the exercise trail an excellent overall fitness activity for all ages. Men and women alike will benefit from the physical exercise and aesthetic beauty of being close to nature.

Included in this chart are some examples of exercise stations. Various exercises can be adapted to fit into the course, and the ones mentioned here are just ideas. The order of stations also can be altered.



TRAIL SURFACE

The trial surface must be suited for year-round usage. Trails with exceptionally hard surfaces will get heavy use from bike riders as well as joggers and hikers. Gravel surfaces are not very resilient and make it difficult for biking. Joggers generally prefer softer surfaces, and may choose to jog along the grass border of the trail if the surface is paved or black topped. Both wood chips and shale have proven to be successful surface materials. Both are appealing aesthetically and are not as costly as harder, permanent materials. Rake the trail edges if there is a wood chip or shale surface, since chips and stones could get caught in lawn movers and create a maintenance hazard. The one disadvantage of a wood chip or shale base is that it becomes difficult for biking.

CONSTRUCTION & COSTS

The first step that local park departments should take when considering constructing an exercise trail is to examine an already existing trail in another location. This gives the builder the opportunity to see which parts of the trail get the most wear, and also how much on-going maintenance will be necessary.

The second step is to anticipate expenses. Materials needed for building exercise trails are relatively inex-

pensive and minimal. Most of the major costs involve purchasing sufficient wood and bolts. Surface materials costs vary greatly depending on the quality of the product and the method of installation. The department can save money by surfacing the trail with its own equipment and personnel. Actually local departments can undertake the construction of the entire project. Most exercise stations just call for cleared areas, which can be bordered with 2 x 8 boards and filled with sand, sawdust, or wood chips. Telephone poles can be used ideally for the necessary beams and supports for the individual stations. Local lumberyards are perfect for finding scrap wood for signs. Total costs will depend on the number of stations and quality of the signs.

Private park and playground equipment dealers will provide the entire package for exercise trails to interested communities. Individual communities should decide for themselves whether they want to purchase materials locally and construct their own trail.

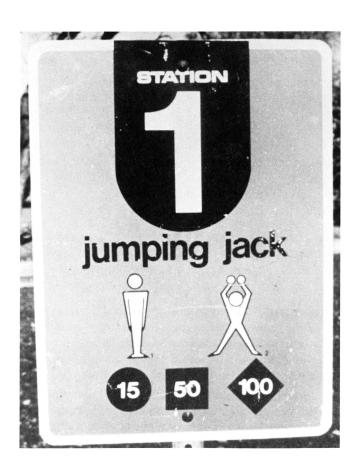
Maintenance for exercise trails should be minimal. Much of the continuous maintenance will focus on preening overhanging branches and raking and repairing the trail surface infrequently. One important trail maintenance tip is to make sure that all wood used is properly sealed for weathering. This also is a safety precaution as the sealant reduces the probability of getting slivers from the wood.

FUNDING SOURCES

Many large retailers or manufacturers may be interested in sponsoring a community exercise trail. This is a public relations venture for the sponsor, since their name will be included on station signs and publicity brochures. By sponsoring a project of this sort, the company shows support of the overall concepts of exercising and physical fitness. This is a popular means of contributing to local communities for many companies.

Exercise trails are a relatively new, unique and inexpensive way of providing recreation to participants. The combination of environmental awareness and physical exercise that users receive from the course is reason enough for considering having an exercise trail in your community.

The Department of Recreation and Parks at the University of Missouri-Columbia has available on loan a tape and slide presentation showing the various types and appearances of exercise trails. Write: Department of Recreation and Parks Administration, 623 Clark Hall, University of Missouri-Columbia, Columbia, Missouri 65211.



EXAMPLES OF EXERCISE STATIONS

EXAMPLES OF EXERCISE STATIONS			
			Materials Need
Loosening &	1.	Stretching:	
Stretching		achilles & calves	wooden pole for
Stations			leaning
	2.	Sitting toe	
		touches	clearing
	3.	Standing toe	
		touches	clearing
	4.	Jumping jacks	clearing
		Knee lifts	clearing
	6.	Repititious log	
		hops	series of permanently
		Поро	installed logs
	7	Step-ups	2 round stumps
	· ·	Step ups	(varied lengths)
More Strenuous	8	Body stretching:	(varied lengths)
& Physically	0.	windmills	3 poles, 2 chin-up
Exerting Stations		willdillillis	bars, varied heights
Exercing Stations	O	Body twists	wooden plank/flat
	٦.	body twists	_
	10	Ch:	angular surface
		Chin-ups/pull-ups	same as #8
		Hop-kicks	clearing
	12.	Vaulting over bar	3 short vertical poles,
	12	D 1	1 horizontal bar
	13.	Push ups	short wood blocks for
		a:	hands
		Sit-ups	clearing
		Bench leg raises	permanent bench
	16.	Hand walk	parallel bars
			(installed)
		Squat thrusts	clearing
	18.	Balance beam	
		walk	permanent beam/
			short pole
T	10	T	1 1 1 0
Tapering &	19.	Isometric push	wood plank for
Cooling Off	20		leaning
Stations	20.	Complete leg	clearing/wood bar
	21	stretches	1
		Hurdler's stretch	clearing
		Arm circles	clearing
	23.	Crossed leg toe	
	2.4	touches	clearing
	24.	Neck & shoulder	1
		twists	clearing

[■] Issued in furtherance of Cooperative Extension Work Acts of May 8 and June 30, 1914 in cooperation with the United States Department of Agriculture, Leonard C. Douglas, Director, Cooperative Extension Service, University of Missouri and Lincoln University, Columbia, Missouri 65211. ■ An equal opportunity institution.