

quickly through the rappeller's hands, causing rope-burn.

Only two vertical cliff rescues were required. In both cases, climbers were evacuated in a litter with full C-spine precautions. In most other cases, the climbers were encountered, treated, and evacuated from the base of the cliff.

As seems to be the case with the previous several years, the average age of the climbers was 39 and the average degree of difficulty of the climbs was moderate AT 5.8.

The incident reports are very brief in terms of narrative, and therefore, no specific narratives are included. From time to time, as in the case of last year, reports are sent forward by the persons involved. (Source: From the Annual Report submitted by the Mohonk Preserve and Jed Williamson)

## **FALL OR SLIP ON ROCK, BELAYER ERROR**

### **North Carolina, Crowders Mountain State Park, Gumby's Roof**

Ringo Willoughby (31) and a female friend were top-rope climbing in the Gumby's Roof area on Crowders Mountain during the afternoon of Saturday April 21. Ringo was approximately 20 to 25 feet on route when he fell. His belayer was unable to arrest his fall. He subsequently fell to the ground where he broke his right ankle. A backpack and some resistance from the belay device seems to have slowed his descent, thus reducing the potential for further injury. Further investigation revealed that Ringo's partner was an inexperienced belayer and was taught how to belay prior to the rock climb.

Crowders Mountain State Park personnel and Crowders Mountain Fire and Rescue completed the litter evacuation of Mr. Willoughby. (Source: Jane W. Conolly, Park Ranger II, Crowders Mountain State Park, and Aram Attarian)

### **Analysis**

This incident speaks for itself. Belaying is a fundamental climbing skill that is learned and perfected over a period of time. It is not a skill that can be taught (or should be taught) in a few minutes prior to beginning a rock climb. In addition, Mr. Willoughby was not wearing a helmet. Given the dynamics of the fall and the condition of the site where Mr. Willoughby landed, he is lucky that he didn't suffer a head injury. (Source: Aram Attarian)

## **NUT OR CHOCK PULLED OUT, POOR POSITION**

### **North Carolina, Moore's Wall, Sentinel Buttress, Zoo View**

On September 2, Ron Lantham (37) and friends were climbing Zoo View, (5.8) a popular climb on Sentinel Buttress. After completing the first pitch, Lantham, the leader, constructed a belay anchor under a large roof. He placed the belay anchor low and redirected the rope through a single piece placed overhead. His second fell, causing the upper placement to take the force of the fall, causing it to pull out. The resulting shock-load caused the belayer to lose control of the belay and drop the second.

The victim remained dangling on the rope for several hours after falling approximately 50 feet. Stokes County Mountain Rescue lowered the climber to the base of the wall around 7:30 p.m. The climber was airlifted to Baptist Hospital in Winston-Salem. He had a fractured ankle and possible internal injuries.

## **Analysis**

Three important factors should always be considered when setting up any belay: Anchor (SRENE: Strong, Redundant, Equalized, No Extension), friction (belay device), and position (climber in relationship to his/her anchor and direction of pull). In this case, the leader ignored his position in relation to the direction of pull and the dynamics of a potential fall. The climber should have positioned himself below the anchor rather than above it, in either a sitting or hanging belay with the belay device attached to the harness. Redirecting the rope in a hanging belay can be done more efficiently, especially if the belayer is facing the anchors. Or the leader may have had more control if the belay device was attached directly to the belay anchor via a Munter hitch, GriGri, or other device suitable for this purpose. This approach may have given the belayer more options, especially in executing a belay escape and assisting his partner, or the leader could have climbed through the overhang and set up his belay—the preferred set-up. (Source: Aram Attarian)

## **INADEQUATE WATER—DEHYDRATION, EXHAUSTION**

### **North Carolina, Moore's Wall, Sentinel Buttress**

At approximately 1800 on June 6, I received a radio communication from seasonal office assistant Ryan Moorefield. He had received a call from Stokes County Communications that a climber on Moore's Wall had phoned 911 by cell phone to advise of an unconscious climber. I arrived at the scene (the base of Sentinel Buttress) at 1820 and was advised by the individuals on the scene that a climber, Jason Blevins (19), had been approximately 50 feet from the top of the climb when he passed out from dehydration and exhaustion (all Blevins had to drink this day was a half can of soda). Two climbers, Zack Blevins and Jesse Kale (not part of the climbing party), helped lower Jason onto a large ledge approximately 100 feet from the base of the climb. At this time Blevins regained consciousness but was disoriented. When I arrived, I spoke with Kale, who stated that Jason was conscious and speaking with no obvious injuries but requested water. While awaiting the arrival of Stokes Mountain Rescue, water was passed up to them via rope. Mountain rescue arrived at approximately 1845 and was led to a point directly above the climbers by myself and Ranger Joe Deppe. Mountain Rescue members rappelled to the climbers and assisted them to the base of the climb. Blevins was carried out to an awaiting ambulance by Mountain Rescue and Fire department personnel via Stokes Basket. Blevins was examined by medical personnel and signed a refusal to receive further medical assistance form. (Source: Craig D. Standridge, Hanging Rock State Park)

## **Analysis**

Staying hydrated is an important consideration when exercising in any environment. This is especially true when climbing in North Carolina (or other temperate environments) during the hot and humid summer months. It's not uncommon to lose one liter of sweat during one hour of exertion. This incident reminds climbers to make sure that they remain hydrated throughout the climbing experience. Climbers should establish a water-drinking regimen in order to maximize performance. It's recommended that water be ingested prior