"The Gravity of Grotta Cave"

Ludlow woods, South Dakota: 4:00 pm, Tuesday, 7/1/17

There's something different about this spot...

Kaylie paused to catch her breath, hiking up the strap of her bag, and stared down the wooded hill at the forest floor.

The ground looks like it's sagging.

She would have taken a closer look had not the low-lying clouds that'd been promising rain all afternoon made good on their threat. With a thunderclap, the storm began.

I'm never going to find him in this weather.

"Ben!" she yelled into the storm, not expecting an answer. The rain on the leaves drowned out any noise she made.

I might as well go home. It's so wet out here. Oh, why did he run off?

Kaylie turned around just as the rain intensified into a downpour. She considered her options. She could... Slipping up a steep hill was definitely harder than hiking down a dry one, she decided. She began to regret her decision as she more than once fell, sliding until a tree halted her downward progress.

Kaylie Dawson would not normally have chosen to spend her summer days in the forest in the rain—she would've much preferred to be at home reading, or playing games with Benjamin, her brother, and Lienna and Will, her best friends. Today was not a normal day. Yesterday, Ben had gone for a hike, leaving a note that said to expect him home in an hour—only he didn't come home in an hour. It had been over twenty-four hours since he said he'd be back, and by now, Kaylie's parents had half the town searching for him, halting the preparations for Independence Day.

Not that they'll have much luck with either in the rain.

She'd been out in the woods calling for him all day, and now her throat was sore, her legs were tired, and she was soaked. Even though the longer Ben was missing, the less likely he was to be found, Kaylie was exhausted. It was time to be home. She trudged up the rain-slickened driveway to her house, disappointed and worried.

Benjamin was not an ordinary brother. As a ten year old, most people were surprised to see him in an eighth grade classroom, but Ben was incredibly intelligent. Kaylie didn't mind him being in the same grade as she was. He was a nice enough brother—sure, they'd had their fair share of fights, but most of the time they got along—and they were only in one class together. They didn't really acknowledge that they were siblings at school, which wasn't hard. Ben took after their mother, who was from India, while Kaylie had more in common with her Caucasian father.

While they were at home, they both gravitated to different hobbies. Kaylie liked art and music, which, Ben informed her, was common for a lefthander, but Ben liked collecting rocks.

Kaylie tapped in the garage door code and ducked under the door before it had risen halfway. Her mother, who had been preparing dinner, greeted her in the kitchen. Large dark circles hung under her eyes.

"Kaylie. You must be freezing. Go put on dry clothes before dinner." Mum paused her vegetable slicing to give Kaylie a one handed hug, keeping the dripping knife over the counter. "Did you see any sign of him?" she asked.

Kaylie mutely shook her head. Her mother returned to her cutting board, hiding her face. Kaylie thought she might be crying. "Will and Lienna are in the basement waiting for you. Will brought his dog—he said he had an idea."

"I'll go down once I'm changed," Kaylie said as she pounded up the stairs.

Ten minutes later, wearing dry clothes, Kaylie found Will and Lienna playing with Toby, Will's dog, on the basement carpet. Seeing Kaylie, Lienna rose to her feet, giving Toby's belly one last rub. The girl was barely taller than Kaylie's chin. "Kaylie! Did you find Ben—I'm sure you would've told us if you had, so I guess you haven't? Will has a great plan. You should hear it! It's wonderful! He was just explaining it to me. "Lienna always talked very fast.

"I didn't see any sign of him all day." Kaylie slumped down into an armchair. "You brought Toby, Will. Does he have anything to do with your plan?"

Will smiled slightly and rocked back on his heels. "No. At first, I considered trying to get him to track Ben, but this rain will have washed away his scent. Toby's not that good anyway."

"So? Tell her what your plan is now." Lienna prompted.

Lienna was so obviously excited that Kaylie allowed herself a glimmer of hope. "All right, tell me," she said, closing her eyes.

Will smiled again as Lienna giggled. "But seriously," he said. "It's raining really hard, right?" He waited for the girls to acknowledge: Kaylie solemnly, Lienna enthusiastically. "Ben's smart. He'll know it's not wise to stay out in the rain," he continued.

"That's if he hasn't been kidnapped." Kaylie pointed out.

"It's more likely that he got stuck somewhere." Lienna corrected.

"So where do you go if you're in the woods, it starts pouring, and you're lost?" Will asked.

Neither girl answered, though Lienna was practically jittering with restraining herself. Kaylie was genuinely puzzled.

"Come on!" Will said. "Aren't you South Dakotans?"

"A cave?" Kaylie answered hesitantly.

The hills of South Dakota were riddled with caves. The limestone was eroded by water thousands of years ago, and was still being worn away, leaving behind millions of cavities. A fair number were flooded, though.

"Yes, exactly!" Lienna exclaimed.

"If he's run into trouble in a cave, it's bound to be worse than any trouble he'd find in the woods." Kaylie said morosely.

Will leaned down to rub Toby's belly again. "We'd start searching for him tonight, but I doubt your parents would like that. So tomorrow your dad or mom could come with us and we'll go look around that area north of here where all those caves are."

"Let's go talk with them—over dinner."

Kaylie's house, South Dakota: 8:30 am July 2nd

"I'm not sure I like this. How do you know that Ben's even there?" Kaylie's mom was standing on the front step of her house, wringing her hands nervously. "Don't go down into the caves very far," she reminded her husband. "They could be unstable after the rain."

Will, Lienna, Kaylie and Mr. Dawson were bustling about the family's truck, filling it with water bottles, emergency food, flashlights, coveralls, rope, and rain slickers. Toby was running about getting in everyone's way, thwacking them with his damp tail.

"Relax, Mrs. Dawson. We're just going to go call for Ben around that area," said Will, grabbing Toby's collar to hold the excited retriever still. "Toby might help us sniff around a few caves, and as soon as we find Ben, we're coming straight home."

Soon Mr. Dawson had packed everything away, loaded the kids and dog into the backseat, and started the engine.

"Don't worry, honey; we'll be back around 4ish," he said to his wife. She waved goodbye uncertainly from the porch.

The truck bumped over the uneven track, rumbling to a halt as they reached the woods. Mr. Dawson climbed out of the driver's seat and began passing out the gear.

"Okay," he said. "Your backpacks have first aid kits in them. We're not bringing the flashlights or coveralls from the truck yet." He made eye contact with each of the teens. "We are also *not* going into the caves. Just yell for Ben." He started off into the woods, beating small bushes aside. "If you find Ben, call me. Make sure you can hear each other at all times. Do *not* get lost."

They spread out into the woods, each keeping the others within earshot. Will had let Toby off the leash and had given him an old hat of Ben's. The dog still hadn't found any scent. After twenty minutes or so with no results, Mr. Dawson had the group split in half—he and Lienna heading west, Kaylie, Will, and Toby heading south.

"Stick together. If you find him and he's stuck in a cave, call me and I'll get the rope and flashlights from the truck and find you," said Mr. Dawson.

Kaylie followed Toby around a mossy boulder. The retriever had set out excitedly in a northeasterly direction, nose to the ground.

"Don't get your hopes up yet," Will reminded her. "In all likelihood, he's just following a deer."

Kaylie nodded, but stopped suddenly when Toby let out an enthusiastic bark. His tail shot into a curl and his ears pricked. Glancing back at Will and Kaylie to make sure they were still there, he took off at a run, shooting through the trees and around rocky outcrops at full speed, still woofing happily.

"Did you see his ears go up?" Kaylie asked.

Will nodded. "He heard something."

There was no way the two teens could keep up with the galloping dog, but they sprinted after him all the same, following his barking through the forest.

Kaylie threw out her hand, bracing herself against a tree to stop her momentum.

"Ben!" she yelled, and then listened, taking several deep breaths.

Will halted behind her. "Toby stopped. He's over there. I see him."

The dog was dancing about a rocky depression in the ground. Kaylie felt a wild stab of hope. As she drew nearer, she saw something (someone?) in the bottom under an overhang. Toby looked up, smiling and wagging, and then picked his way down the edge of the sinkhole. The triumphant retriever was nudging the person huddled on the rocks with his nose. The person groaned and rolled over, trying to focus on the people leaning down from the ground above him.

"Kaylie?" He said, sounding confused.

"Ben! Are you okay?" Kaylie asked. She scrambled down the lip of the hole, creating her own personal rockslide. "Will, call Dad," she ordered. Will pulled out his phone, hanging back from the edge.

"I'm all right." Ben said. His face, usually a walnut-brown color, was now very pale.

Kaylie gently pushed Toby out of the way. "What happened? How'd you get down here? Can you stand up?" She was so relieved that they'd found him that could hardly stop talking.

"I was going for a walk—there were some things I wanted to check out." Ben explained. "I strayed too close to one of these sagging spots in the woods. It collapsed and I ended up down here. I think I sprained my ankle—I'm not dehydrated, though. I've had plenty of water."

"Your dad's on his way, Kaylie." Will interrupted. "He's on the other side of the woods. He said he might not be able to find us right away."

"I couldn't climb out, so I stayed under the overhang. I'm lucky the sinkhole didn't flood; all the rainwater was draining out somewhere into the underground river."

"We should get you out of the hole," Kaylie decided. "Will, would you help me, please?"

Will and Kaylie each grabbed one of Ben's arms. Ben held his broken ankle out of the way and used the other to walk, leaning heavily on his sister.

They set Ben down at the edge of the hole. "What was that about the underground river, Ben?" Kaylie asked.

Instead of answering directly, Ben opted for the "long and enigmatic" explanation.

"Listen, Kaylie," he said urgently. "Have you been near that river just to the south of town within the last few days? The one that flows out of the ground right by the highway near our house?"

"We've been busy looking for you." Kaylie said. "Mom and I did go into town to report you missing at the police station, though they wouldn't do anything until you'd been missing for 48 hours. We passed the river then."

She remembered that it had been swollen, and rather chalky and muddy.

Ben nodded. "This is important, Kaylie. Did the river seem especially muddy?"

"Yes..? There's not something else wrong, is there?"

Ben suddenly looked even paler. "Will, Kaylie, I need you to take me into a cave—any cave—so long as it's near that river," he said urgently.

Will frowned. "Your dad specifically ordered us not to enter any caves."

Ben grabbed a nearby tree, trying to use it to help him stand. Panting and clutching its bark, he said, "They'll be much worse consequences than grounding if I don't enter a cave." He paused, staring down at his twisted ankle. "I don't suppose one of you could wrap this up for me so I can at least stand on it..."

Will shrugged, opening his backpack to find the first aid kit and knelt down to wrap Ben's foot.

"Sorry," Kaylie apologized. "We should've thought of that sooner."

"I'm all right—or at least I will be," Ben insisted, as Will finished, tying off the ends. He looked down at Will. "Please, you're bound to be more reasonable than my sister. I need to get into one of those caves! This could be life or death for our whole town!"

Will almost looked convinced. "Kaylie, maybe we should take him down there. He seems serious..."

"If you won't take me, I'll try to go myself and probably die in the attempt." Ben warned.

Kaylie frowned, feeling that both boys were being unreasonable in the extreme. "Fine," she said. "But just for a few minutes."

It took them a few minutes to reach Grotta cave—the largest cave within a half mile. The opening was only a few feet wide, but opened into a fair-sized cavern, with passages heading off in different directions. That was what Will said, anyway. He had explored the caves more extensively than either Ben or Kaylie. Last time he'd been in the cave, he and a few friends had found a branch of the underground river at the end of a passage. When they had come to the end of the marked trail, they found a low-ceilinged, cramped passage through which the river flowed.

"That one will do." Ben commented as the threesome arrived at the gap marking the entrance.

It took some work to get the injured Ben through the narrow gap without causing any more damage to his foot, causing Kaylie to complain, "Is this really necessary?"

"Yes, absolutely," Ben said stoically as they continued down the passage, even though his face had again gone white with pain.

Now even Will was thinking of turning back. He was holding his phone out ahead of them, using the dim flashlight to warn the others of protruding rocks. Fortunately, the path was clearly signposted.

"Ben," he said after rounding the third curve. "We should go find your dad. We don't even have a real flashlight. To be honest, this wasn't such a great idea."

The passage ahead turned sharply downward. Ben stumbled on the uneven ground for the third time. Kaylie, who was behind him, caught his shoulder to keep him from falling. "How much further to the river?" He asked.

Will shrugged. "I don't know. Five minutes. Maybe ten?"

Ben regained his balance. "Let's keep going."

The river was closer than Will had estimated. As he rounded the next bend, Will was greeted by the sight of a large dark cavern filled with the sound of rushing, pounding water. His phone light barely illuminated ten feet in front of him.

Will gasped. "That was not like this last time."

At his gasp, Ben shouldered his way up next to Will. They stood on a narrow ledge protruding above the river, which seemed to have hollowed out a huge space.

"Oh, no." Ben breathed. The part of the chamber that they could see was quaking from the noise of the river. There didn't seem to be much rock holding up the ceiling.

"You should move back. That ledge doesn't look stable." Kaylie warned.

Ben let out a shaky breath. "You're right. It isn't." Ben and Will moved back into the passage with Kaylie. Ben was shaking slightly and breathing rapidly.

"What's going on, Ben?" Kaylie asked. "Why are you so freaked out?"

Ben looked her in the eye. "Kaylie, this river flows all the way under the town. Do you remember last week when Mr. Benton was having trouble closing his front door?"

"He said the frame had sagged. He fixed it though—got a new doorframe." Kaylie remembered.

"That was a symptom, not the problem. All of those dips in the ground around the woods, like the one that collapsed underneath me—those are more proof."

"Proof of what?" Asked Will.

Ben started back down the passage. "Grotta and maybe most of the town is going to sink. The earth has eroded away due to the rain. The extra water made the river swell and it's carved out a huge, unsupported network of caverns underneath the town and surrounding woods. You saw the river." He stopped and turned around to look at Kaylie and Will. "I'm sure you've noticed the sagging in the woods. Mr. Benton's door was only one of the signs. The river when it flows out from underground is full of the eroded minerals. Now do you see what I'm getting on about?"

Will stopped in surprise, causing Kylie to bump into him.

"What? When? Is there anything we can do to stop it?" he questioned.

"Not now. The river would thwart any attempts to stabilize the chambers. I expect the caves will start collapsing within a few days... So when will there be enough weight over the larger caverns to cause them to cave in...?" Ben paused, giving the others time to think.

Kaylie thought hard. Independence Day was coming up; the town council would partner with the local fire department to put on a parade. "The parade!" she exclaimed. "All of those fire trucks on Main Street."

They had reached the cave mouth. Ben nodded glumly, squinting in the shards of sunlight streaming through the crevasse. "Everyone will be out to see the festivities."

Will exited the cave first, helping Ben through. "We have to get the council to cancel the parade! A sinkhole could wipe out the town—and our emergency services."

Kaylie was the last to leave the cave. She could just imagine what might happen. The 4th of July: fire trucks stream down the street, smiling, laughing people—families—line the sidewalks. The street droops, and then collapses, leaving a hole that quickly fills with water. Buildings crumble, and the first sinkhole is followed by more until the town barely stands. Shuddering, Kaylie said, "Will, would you call Dad again? We need to tell him about this…"

Ben shook his head. "The council won't cancel the parade on the word of a ten-year-old, but there's not enough time to show them that I'm right."

Will pressed talk. Holding the phone to his ear, he heard it ring twice before Lienna answered.

"Will!" she said. "Do you know where you are? We're in the truck, trying to find you."

"We're at the south entrance to Grotta cave. Can Mr. Dawson drive over to meet us? Ben has a sprained ankle- and there's another problem that he discovered."

"What's wrong?"

Ben shook his head again, mouthing "Let me explain." Will offered him the phone, but he pushed it away. "Later." He said.

"Ben says he wants to explain it later." Will heard Lienna relaying the information to Mr. Dawson.

"We'll be there in a few minutes. I'm going to call Mrs. Dawson now," Lienna informed him.

"Great, bye." Will pressed END.

"So now we wait." Kaylie said.

"Now we wait." Ben agreed.

Ten minutes later...

Mr. Dawson's battered truck shuddered to a halt, its two passengers spilling out. Mr. Dawson ran straight to his son.

"Ben!" He cheered, hugging his son tightly. "Oh, I'm so glad you're okay! We should take you to the ER to get a cast on that foot."

Ben squirmed away from the hug. "Dad, I can't go to the hospital right now, not while the entire town's in danger."

Mr. Dawson shook his head vehemently. "You're going to the ER, and that's final. What are you playing at? You're never the Drama King."

Kaylie tapped her father's shoulder. "Dad," she said. "He's serious."

Mr. Dawson appealed to Will. "What's going on here? I know these two will occasionally mess around for attention, but what do they really mean?"

It took trip into the cave for Mr. Dawson to believe Ben's story. After he, Lienna, and Will reemerged, he said to his son in slightly shocked tones, "I'm calling Mayor Cliver. How did you see that? All the clues?"

Ben shrugged. "You can take me to the ER now, as long as you get the mayor to evacuate everyone."

Mr. Dawson did call the mayor, and after ten minutes of going through various secretaries, took three hours to convince Mayor Cliver to issue an evacuation recommendation until the town could be stabilized. Needless to say, most of the townspeople were not thrilled to be evacuated on the word of a few people, one of whom was only ten, but in the long run decided that is was better to be displaced than to be crushed or drowned. Thankfully the weatherman helped lighten the blow: he predicted that in all likelihood, the Independence Day parade would've been canceled anyway due to rain.